Chesapeake and Ohio Railroad: Thurmond Yards
East side of the New River, opposite the
mouths of Arbuckle and Dunloup Creeks
Thurmond
Fayette County
West Virginia

HAER No. WV-42

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HISTORIC AMERICAN ENGINEERING RECORD

CHESAPEAKE AND OHIO RAILROAD: THURMOND YARDS

HAER No. WV-42

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| Location: | Along the eastern side of the New River, opposite the mouths of Arbuckle and Dunloup Creeks in Fayette County, West Virginia.<br>UTM: 492760 4201530<br>Quad: Thurmond, West Virginia |
| Date of Construction: | Established in the 1880s. |
| Present Owner: | CSX Corporation<br>One James Center<br>Richmond, VA 23261 |
| Present Use: | Vacant |
| Significance: | The Thurmond Yards were established during the 1880s to facilitate the transportation of the New River Gorge's smokeless coal to markets along the C & O Railroad. As a maintenance and repair facility the Thurmond Yards were a major regional feature along the C & O throughout the steam engine era. As a major assembling point for coal cars from different mines, the marshalling yards at Thurmond were credited with handling more coal, and thus producing more revenue, than all but a few such facilities. Finally, as a town where only trains travelled down Main Street, Thurmond gained a reputation as a regional center of commerce and recreation, legal or otherwise. |
| Historian: | Billy Joe Peyton, 1988. |

Introductory Overview

The once thriving railroad town of Thurmond is located on the New River in Fayette County, West Virginia. Now home to about sixty people, it remains as an historic reminder of an earlier industrial era in the rugged New River Gorge region.

Thurmond lies within the boundary of the New River Gorge National River, a fifty-two mile long, 62,000 acre national river corridor stretching from Hinton northward to the U.S. Route 19 bridge near Fayetteville. Congress assigned management duties to the National Park Service in 1978 in order to conserve and interpret outstanding natural, scenic, and historic resources and to preserve as a free flowing stream a segment of the New River in West Virginia. The river's headwaters may be found in the mountains of North Carolina at Blowing Rock. It flows in a northwesterly direction through North Carolina, Virginia, and West Virginia a total of 320 miles from its north fork. At Gauley Bridge the New River joins the Gauley River to form the Great Kanawha, which empties into the Ohio River at Point Pleasant, West Virginia.

Characterized by its rugged topography and swift whitewater, the New River is one of the world's oldest rivers in terms of geologic time. Erosion through the millennia has cut a deep cataract into the landscape, literally exposing a cross section of the earth's surface. Geologists estimate that extant rock formations in the gorge are more than 330 million years old. A vertical drop of nearly 800 feet over its sixty-five mile journey through the narrow gorge gives New River an average water speed between 3.5 and 7 miles per hour, causing different swirling actions and creating a highly complex and chaotic motion in the river. It is this motion coupled with the steep gradient that has enabled New River to cut its channel over 1,000 feet in places through prevailing rock formations.

The New River represents a natural corridor across the Appalachian Mountains linking the Ohio Valley to the Virginia and Carolina Piedmont. Long before Europeans penetrated the New River area, it was home at various times to different groups of Native Americans. Prehistoric and Protohistoric cultures representing five traditions lived in the New River Valley between 13,000 B.C. and A.D. 1,800. These were: the Paleo-Indian Tradition, an Appalachian Archaic Tradition, the Carolina-Piedmont Tradition, the Laurentian Tradition, and the Kanawha Tradition.[1] Little research has been done on these cultures, and specific information about them is extremely limited.

By the time the first Europeans penetrated it the New River

country was used predominantly as a hunting ground by the Iroquois Confederacy. Historically, it was part of an extensive network of Indian trails used by the Iroquois for raids on Cherokee and Catawba settlements in the southern colonies. Trails once formed an interwoven network of passages in all directions around New River Gorge, but as a general rule the rapid current and severe topography precluded early inhabitants from using it as a trunk route. In the late eighteenth century groups of Ohio Indians came through the region en route to attack settlers in frontier Virginia. Mary Draper Ingles traversed the New River country after her legendary escape from Indian captives in 1755. Before the coming of the Chesapeake and Ohio Railroad, so-called secondary trails provided the only access to this rugged country.

The first European exploration of the area came in 1654 when Major General Abraham Wood mounted an expedition down the New River. In 1671, Wood was commissioned by the governor of Virginia with the purpose of scouting the area west of the Alleghenies for "finding out the ebbing and flowing of ye South Sea or of the water on the other side of ye mountains." Although Wood was unable to make the journey himself, Thomas Batts and Robert Fallam did traverse the New River to near the present Virginia-West Virginia border.[2] Many other Europeans subsequently explored the region before the first recorded settlement by Peter Bowyer in 1798. This site, first known as Bowyer's Ferry and later called Sewell, was one of the earliest and most important industrial towns in the gorge.

Early settlers were generally of English, German, or Scotch-Irish ancestry, mostly from the southeast counties of Virginia and Pennsylvania. The first pioneers were mainly subsistence farmers--fiercely independent and self-sufficient. A bounty of game and wild foods provided nourishment to supplement the crops raised in their own gardens. Travel for the pioneers was limited to the old network of Indian trails criss-crossing the gorge. Many twentieth century roads follow these old routes into the region.

A traditional commonwealth society existed in the New River country before the Civil War, with the advent of hostilities life quickly changed. Soldiers came early in the conflict to occupy the Kanawha and New River Valleys, which were seen as keys to the possession of southwestern Virginia. Generals Robert E. Lee and George B. McClellan, and future presidents Rutherford B. Hayes and William McKinley soldiered here.

Sentiment was divided for the Union and Confederacy in the new River area, and in many cases brother fought against brother. To be sure, the war left an indelible mark on the region--but more

drastic and pervasive changes permanently altered the New River country shortly after war's end. At the cessation of hostilities, the region was poised on the brink of a radical transformation from a generally homogenous and independent traditional culture into a multi-ethnic industrial society.

By 1870, the United States was in the midst of its Industrial Revolution. This was the age of steam, and the nation needed a ready supply of fuel to power its factories and heat its homes. Wood served the purpose in the early days of the Republic, replaced by anthracite coal from Pennsylvania when the great northeastern hardwood forests were depleted. Then, as railroads began to snake westward over the Appalachian mountains an incredible source of bituminous coal became readily available.

The quality and accessibility of any coal seam depends on many factors. Thickness, climactic conditions, and the action of geologic upheavals all influence its mineability. Southern West Virginia coal was formed during the coolest, wettest part of the Pennsylvania coal age, and due to resultant geologic conditions it contains little sulphur, low ash and a high fixed-carbon rate. Such "low volatile" coal (highest bituminous rating) has few equals in the world. New River coal, of this high caliber, is termed "Smokeless Coal." It was in demand in the late nineteenth and early twentieth century as a clean, hot burning fuel.

While the quality of coal improves from north to south in West Virginia its accessibility correspondingly decreases. Some of the state's finest seams lie within the most severe topography, although outcroppings of the mineral can sometimes be found at ground level. Indians burned this coal and early travelers saw that it was plentiful. In 1787, Thomas Jefferson wrote in his Notes on the State of Virginia that all of western Virginia was laced with coal. By 1835, an account of the extensive field was published in Siliman's Journal of Sciences. Consequently, early coal pioneers knew that the mineral lay in the New River country. Through uplift and erosion, outcroppings of the black mineral punctured the walls of the New River Gorge hundreds of feet above New River. Tapping the rich resource was as easy as poking a driftmouth into the mountainside, but loading and shipping it was a monumental problem. There simply was no economical way of accomplishing the task before the Chesapeake and Ohio Railroad opened up the gorge in 1873.

The first plan to open up the gorge was advanced long before the railroad came through. In 1784, George Washington proposed the New River as the route for the planned James River and Kanawha Canal. He envisioned an all-water route through the "Central Line" of Virginia that would run up the James River, over the Appalachians, and down the Greenbrier, New, and Kanawha Rivers to

the Ohio. This ambitious project was wholly within the state of Virginia, providing a direct route between Tidewater and the Mississippi Valley to New Orleans and the Gulf of Mexico. It was envisioned in Richmond as Virginia's answer to the Erie Canal.

The James River and Kanawha Canal did indeed reach the headwaters of the James River at Buchanan, Virginia, but it never reached the Ohio. Amazingly, the dream of an all-water route over the Alleghanies to the Ohio River survived long after railroading had come into being. In fact, it was not until construction started on a rail line west from Clifton Forge in 1870 that the idea of a canal to the Ohio River was abandoned.

Carving a trunk line railroad through the precipitous New River Gorge was a monumental chore. From an engineering standpoint, the most feasible grade through the mountains was nature's own path down the Greenbrier and New Rivers to the Kanawha, following the proposed route of the ill-fated James River and Kanawha Canal. The railway, in fact, purchased its right-of-way directly from the defunct James River & Kanawha Canal Co., filling in the canal in places and building the rail line over the canal towpath in others. After three hard years of work, the C & O Railroad was completed on January 29, 1873, from Richmond to the Ohio River at Huntington, West Virginia.

In late 1873, the first load of New River coal was shipped out of Colonel Joseph L. Beury's Quinnimont mine. Shortly thereafter, John Nuttall opened a mine on Keeney Creek. Before year's end, there was a coking operation at Sewell and an iron furnace in operation at Quinnimont. As the nation's demand for coal rose, so, too, did activity and industry in the gorge. By 1879, Quinnimont alone accounted for 49,953 of a total 365,523 tons of coal shipped from mines along the New and Kanawha Rivers.[3]

New River coal is of outstanding quality. Not only does it burn hot with few impurities, it is also a superb coking coal that rivaled the famed Connellsville coke for use in steelmaking. The New River coal field produces semi-bituminous, low-volatile, high grade coal available in "lump", "egg", "stove", "nut", "pea", "slack", and "run of mine" sizes. Carbon content is about as high as the best grades of anthracite, with the Sewell seam containing 75.91% carbon and the Fire Creek seam rated at 77.06%.[4] It was reported that the Sewell seam produced:

> "a type of the best Pottsville coals in all the southwestern region of the state and....they are the only coals in the United States which surpass in effective heating results for steam, domestic and general fuel purposes the best grades of Cardiff coal from Southern Wales."[5]

New River coal and coke production was a major industry by 1880. In that year, over 250 beehive coke ovens produced between 60,000 and 70,000 tons of the industrial fuel.[6] An industrializing America was devouring so much New River coal that Fayette County mined 1,522,420 tons in 1888, becoming the first West Virginia county to produce more than one million tons in a year.[7]

Fayette County's population nearly doubled between 1870, when it stood at 6,647, and 1880, when it was 11,560. By 1930, there were 72,050 people living in the county, 12,692 of whom were mining coal.[8] While many factors have shaped the area's fortunes, none has been as significant as the coming of the Chesapeake and Ohio Railroad and the subsequent exploitation of the coal found along its route. Their importance and interdependence in the late nineteenth and early twentieth centuries cannot be overstated.

Steam was the prime mover during the gorge's industrial apex, and coal was the fuel which stoked the boilers of the steam engines. Across the nation towns sprang up along 19th century rail corridors. Since the C & O was the first and only railroad in the New River area the rugged gorge became the center of activity evidenced by the fact that the railroad listed a total of thirty-six passenger stops in the gorge in its 1906 Industrial Directory. Development soon spread up the gorge like the branches of a giant tree following spur lines built to tap outlying coal seams.

Between 1880 and 1930 the New River Gorge was a bustling, grimy industrial region. Not only was its coal being exploited, but the timber industry was in full swing, as well. As a result of these extractive industries boom towns like Sewell, Beury, and Meadow Creek sprang to life virtually overnight. Coal and logging camps were self-sufficient and autonomous, each with a company store, a church, a doctor, and their own recreational facilities. An extensive network of rail corridors linked company towns as passenger trains and coal drags alike ran continually in and out of the region.

Almost as quickly as these towns rose from the banks of the New River they began a steady decline when the tide of industrial prosperity began to ebb after 1930. As bus lines were established and motor cars became available in the 1920s and 1930s, the company towns began to disappear because miner's no longer had to live within walking distance of the mine. Modest private enterprise developed to provide goods and services and take the place of the company store. Connecting rail lines were less important because roads ran to previously inaccessible areas, and people started to gradually migrate from the New River

Gorge to the surrounding plateau.

While advancing technology offered most Americans a new and better way of life, in the gorge it began a string of events that led to the ultimate demise of industry and altered the social and economic fabric of the area. The Great Depression added to the downward spiral as mines closed when coal prices dropped 39%,[9] discouraging operators from investing into the industry. Many mines closed because they were simply played out at about the time mechanization was to forever change the profession of mining. This combination of factors meant unemployment for scores of miners. Consequently, 2,580 coal mining jobs were lost in Fayette County between 1910 and 1950.[10]

Coal mining underwent a great change in the 1930s as companies fell by the way or were consolidated into larger concerns. Almost 70% of all coal mined in the gorge in 1941 was produced by the New River Coal Company (2,387,879 tons) and the Pocahontas Consolidation Coal Company (1,655,865 tons).[11] By the 1950s, because coal production was down and coke making had all but ended many miners left the area in quest of work in the industrial Midwest while others took their United Mine Workers pension and settled into retirement. By 1968, coal was coming from 35 mines employing only 620 miners in the New River section of Fayette county.[12]

Through all the years of boom and bust the C & O Railroad remained a ubiquitous presence in the gorge. Its large roundhouse complex at Hinton, yards at Quinnimont and Prince, shop and yard at Thurmond, and miles of branch lines up the gorge employed over 1,000 trainmen, clerks, maintenance workers, and laborers. While the railroad seemingly weathered the technological storms of the 1930s and 1940s, the biggest change came in the 1950s as a result of dieselization which, like mine mechanization, eliminated jobs.

Diesel engines are more economical and convenient than steam locomotives. Unlike steamers, they do not use fuel while idle, and they can be started and ready to run at the flip of a switch. Even though diesels were initially more expensive than steam units, their fuel economy is greater and they can travel farther without inspection. More annual mileage can be accrued on a diesel, overhaul and repair costs are not as great, and damage to the rails is less. To the C & O, this new motive power meant a 28% reduction in operating costs in 1955, which translated to a savings of $25 million.[13]

Diesels were not always the subject of praise, however among railroaders, because they changed the very face of railroading. A crew of two on a diesal could take the place of six or more

trainmen on a heavy freight train with three engines. Skilled workers like machinists, pipefitters, boilermakers, and blacksmiths were subsequently rendered obsolete.

After dieselization was complete, the end of an era was at hand. Mining towns once teeming with life and covered in coal dust became ghost towns virtually overnight. Nature and kudzu are now fast reclaiming the area, and places like Sewell, Kaymoor, and Nuttall are all a part of the history and lore of a bygone era. Today, few people live in the gorge and even fewer work there. Most spur lines have been taken up for scrap and even though the C & O main line remains, the railroad's presence is diminished to a fraction of what was in the age of steam.

Today, the New River Gorge National River envelops that section of the New River where mining, cokemaking, logging and railroading once took place. In 1978, the federal government designated a fifty-two mile, 62,000 acre river corridor under the management of the National Park Service. Thousands are now attracted there by the best whitewater rafting in the eastern United States. A fledgling tourist industry is growing to create jobs in the service sector. Although the New River Gorge is no longer an important industrial region, its industrial heritage is unique and noteworthy.

Thurmond and the Chesapeake & Ohio Railroad

Industrialization of the New River Gorge is unique because it was accomplished in the face of great physical obstacles unparalleled in the eastern United States. With the completion of its main line from Richmond, Virginia, to Huntington, West Virginia, the Chesapeake and Ohio Railroad achieved a masterful feat of engineering. Cutting through a 1,000 foot vertical sandstone-walled gorge required surveying engineers to be lowered by block and tackle into the area. Despite great land and water obstacles that mandated the track to be perched between the water and canyon walls, the railroad built its right-of-way through the gorge.

This forbidding landscape in 1873 was home to a handful of people living in a few scattered settlements. A condensed C & O timetable for 1876 shows passenger stops at Hinton, Quinnimont, and Hawk's Nest.[14] Soon, after that, however, Fire Creek, Red Ash, McKendree and twenty other towns lined the riverbanks between Hawk's Nest and Thurmond.[15]

Coal and lumber camps were "boom" towns built by the company for one purpose only--to exploit a given resource. They were naturally built where the resource was found, often times in

isolated and inaccessible regions. In this captive environment the company owned everything from the churches to the stores. Private enterprise was not to be found in these places, a merchant middle class virtually nonexistent.

Thurmond was not a coal or lumber camp--it was first and foremost a railroad town. Since it was on the main line of the railroad, it could not be considered isolated. Private enterprise developed in Thurmond because the management of the C & O was concerned only with running a railroad and not with operating a company town. It differed markedly from the quintessential company town due to its advantageous location, and because a broad-based economy and a healthy merchant class provided a wider range of consumer goods and services.

The Thurmond site was key to the railroad with its marshalling yards, main line freight and passenger depot, and local engine repair center. Its strategic location in the heart of the New River Gorge helped to assure Thurmond of a prominent spot in the area's industrial heritage. Yet, when one travels through the town today it is difficult to imagine the range of activity once found there. Along with the memories of the boom days there remains several important structures that bear witness to its earlier significance.

Thurmond's origins date from 1873, when Captain William Dabney Thurmond purchased a seventy-three acre tract of land on the north side of the New River. This is not an especially attractive parcel taken at face value, being nothing more than a narrow shelf of bottom land at river's edge with a steeply inclined mountainside behind. Directly across the river, however, lay two key features of the site. Tumbling down the gorge on the south side of the river are Dunloup and Arbuckle Creeks, two streams which provide natural corridors from the New River to the surrounding plateau.

Captain Thurmond knew that coal was abundant along the New River. Less apparent, perhaps, was the fact that any coal coming from the south side for shipment out of the gorge had to be carried to the north side via a bridge somewhere near Thurmond's property. The site was in a sense a natural crossroads for river and rail, a prime marshalling point for area coal trains to bring their loads.

Despite the fact that Captain Thurmond saw the chance to develop this advantageous location, nearly twenty years passed before it shared in the industrialization of the region. At first, there was no reason for trains to stop at Thurmond. It was not until 1884 that the first structure, a four room cottage, was built. A post office was subsequently established on May 16, 1887.[16] By

contrast, Riverview, situated one-half mile upriver from Thurmond, had a post office by 1878 and a passenger station shortly thereafter, and Dimmock, just downstream from Thurmond, was a flagstop by 1881.[17]

Riverview and Dimmock both faded into oblivion after 1889, when Langhorne and Langhorne of Charlottesville, Virginia, constructed a triple-span iron truss railroad bridge over the New River at Dunloup Creek.[18] When the first south side branch line opened from the Thurmond Coal Company mine near Arbuckle Creek later that year, two key ingredients for Thurmond's development were in place - access was gained to the coal-rich south side, and there was the modest beginning of a permanent C & O presence.

A freight station was located between Riverview and Dimmock at "Arbuckle" by 1888, as the C & O Timetable Number 28 notes.[19] A wagon road led from the Riverview station to this early freight depot, probably no more than a platform or temporary shelter at trackside to expedite the loading and unloading of freight.[20] Incoming trains brought merchandise for country stores on the plateau, while outgoing freight consisted of farm produce, lumber, and commodities for sale at C & O company stores.

As the first loads of New River coal rolled down Arbuckle Creek in 1889, construction commenced on the assembly yards at Thurmond. Clerical, technical, and supervisory personnel descended on the new town to launch Thurmond's boom era while immigrants and blacks labored to grade the right of way and lay the track. To meet the lodging need for railroad personnel, Captain Thurmond's family began to construct houses near the tracks and on the steep mountain behind the town. In total, over thirty dwellings were built ranging in size from four to ten rooms. The finest extant example is the 1-1/2 story frame weatherboard-sided home of Charles and Dorothy Wells, which has survived with few alterations and is part of the Thurmond Historic District.

Thurmond was home to 175 people by 1898. Two years later it boasted a Western Union and Adams Express office, two general stores, offices of two coal companies, a restaurant, a drug store, a saloon, two milliners, a lawyer, a wholesale distributor, a shoemaker, a jeweler, and a photographer. A frame hotel sat directly west of where the National Bank of Thurmond building is now. This structure burned in 1899, replaced in 1902 by the three-story, thirty-five room Hotel Thurmond (later the Lafayette Hotel).[21] Adjacent to this brick structure was an Armour meat processing plant where wholesale meat was prepared for shipment to area coal camps. A field office for the notorious Baldwin-Felts Detective Agency was in Thurmond, as well. The "Baldwin thugs," as union miners called them, worked

as special agents for the railroad.

Thurmond's south side grew quickly after the Dun Glen Hotel, a 4-1/2 story, 100-room showplace, was opened there in 1901. This hostelry, connected to the railroad bridge by a viaduct, served as the social center of Thurmond and the New River Gorge until it was destroyed by fire in 1930. Coal operators and others transacting business in the gorge stayed at the Dun Glen, while locals flocked to it for dances and social gatherings.

Thomas J. McKell owned much land on the south side, including that parcel on which the Dun Glen stood. He also owned land on the north side of the river adjacent to that owned by Captain Thurmond. Local history notes that Captain Thurmond and T. J. McKell did not like one another because Thurmond was opposed to drinking, gambling, and other pleasures of the flesh which McKell allowed in the establishments that he owned. When the town of Thurmond was incorporated in 1903, McKell quickly incorporated his south side interests as part of Glen Jean, six miles up Dunloup Creek.

As a result of the basic philosophical differences between Thurmond's principal landowners, the riverside community was literally split into separate legal entities after 1903. This rift, however, did not hinder its growth or significance to the railroad. The central business district started to take shape when the Mankin-Cox Building (easternmost structure still standing) was built in 1904, and the Goodwin-Kincaid Building (center structure) was finished two years later. With the construction in 1917 of the four-story brick building that later housed the National Bank of Thurmond (westernmost structure still standing), the streetscape was complete.

Since Thurmond was first and foremost a railroad town, the C & O built a number of structures there. A four-track yard was completed in 1889, and the first passenger depot of record was built in 1897.[22] Before this, the old Arbuckle freight station probably served as a depot of sorts. One of the first yard constructions was a 50' "armstrong," or hand-powered, turntable installed to turn road engines about 1899 at the north end of the bridge behind the depot. On the north side of the tracks and east of the commercial district stood a 24' diameter wooden water tower erected by 1898. Situated south of the tracks and west of the bridge was the 1897 engine repair shop.[23]

Records indicate that the Thurmond yard underwent a major expansion after 1902. In addition to new tracks and switches in both the east and west yards, there was a water column erected east of the passenger depot and another just west of the shop, a three-story sand tower and sand drying house east of the shop,

and a long structure labeled "offices" in place south of the depot. This office structure may have housed a freight depot, as later site maps refer to the freight depot as "warehouses and offices."

Sometime after 1902, a 24' diameter wooden water tower was erected next to the earlier one. Also, the 50' turntable was removed and a 71' turntable, powered by compressed air supplied by air pumps of a turning engine, was built west of the water tank. It was capable of turning all Class G (2-8-0) Consolidation locomotives, including the G-9 which required a 56' 10-3/4" turning radius.[24]
The passenger depot and the offices burned in 1902. In 1904, a large freight depot was planned near where the first turntable had been, and construction was underway on the present passenger depot.[25] With these improvements completed, the ingredients were in place for Thurmond to become a significant regional Steam Age railroad site.

In 1904, Thurmond was fourth on the entire C & O line in total revenue receipts.[26] With the constant movement of coal trains and the belching of locomotive smoke, the air was heavy with dust and cinders; it was dirty, noisy, crowded, and dangerous to walk amidst the mammoth steam engines. In short, Thurmond was a railroad town. At the peak of railroad activity, as many as 200 railroaders worked in three eight-hour shifts in the offices, yards, and engine repair shop.

By far the busiest spot in Thurmond was the large rectangular engine house with its shop that employed around 175 men to service and maintain two engines at once, and a Crew Office at its eastern end where train crews (engineers, firemen, conductors, and brakemen) were selected to deliver empty coal cars or pick up loaded ones.[27] Just east of the engine house was the inspection pit used for daily engine checks. Nearby was an ash pit that ran perpendicular to the track, and emptied directly into the New River.

Thurmond was vitally important to the railroad by 1910, when it produced $4,878,607 in freight and passenger revenue (4,283,641 tons of freight and 76,541 passengers). By contrast, Cincinnati's total revenue that year was $1,816,392, Richmond earned less than $500,000, and Charleston $172,488. The entire C & O system in 1910 earned $24,901,200 in revenue, and the Hinton Division accounted for $10,896,765 of that total.[28] Clearly, New River coal was the lifeblood of the Chesapeake and Ohio Railroad and Thurmond was the heart which kept it circulating.

Between 1910 and 1930, railroad activity at Thurmond was at its peak. In 1910, about twenty local engines were services there.

More structures were added to the complex, including a large coal tower, two new water storage tanks, and a bunkhouse for trainmen. In 1921, the engine house was enlarged to service up to four engines at one time. Perhaps the most noticeable improvement in Thurmond during this time was the large coaling station, which still stands as a silent reminder of steam. Before its construction, Thurmond engines ran up to Stonecliff or down to Beury to "coal" their tenders, and sometimes section crews were even called upon to hand shovel fuel into waiting engines. This all changed in 1922, when the 500-ton concrete coaling tower was completed. Alongside it was the sand drying and blowing house, which supplied the sand necessary for traction and for stopping engine wheels from slipping on the tracks. By 1930 there were numerous other sheds, shanties and support structures in place along the railroad. By then, after about thirty years of expansion, railroad construction in Thurmond was nearly complete.

Nearly every railroad yard had the ubiquitous H2O tank and accompanying standpipes during the steam era, and Thurmond was no exception. In addition to the coaling and sanding facilities, there was a water station at Thurmond which supplied the engines with this necessary ingredient for making steam. Situated throughout the Thurmond yard were two water tanks, and eventually five water columns. The simple but vital operation of "watering" the tender would be done at a different column depending upon the engine's location in the yard and its cargo. Eastbound passenger trains watered at the column east of the station nearest the eastbound main line track, and westbound trains used the column to the west of the depot closest to the hillside. Engines taking on coal watered at the column by the coal tower and trains bound for the south side used yet another column near the bridge.

Superpower engines introduced on the C & O in the 1920s had a definite impact on the railroad properties in Thurmond. The existing 71' turntable proved too short to accommodate new engines like the H-4 Mallet which required 88' 3-5/8" to turn.[29] It was ultimately retired in 1926 and the pit filled. Afterwards, engines up to the H-7 classification were turned on a 100' air-powered turntable one mile upriver at Stonecliff.

In spite of the introduction of big power locomotives that could pull up to 125 loaded coal cars in the 1930s, those years proved to be the last full decade of steam.[30] Probably no one saw it, but by 1930 Thurmond had reached its zenith as external forces almost all at once started to alter the social and economic climate.

Fire plagued Thurmond. A major problem exists in Thurmond because the river offers the only source of water with which to fight a blaze, and the cumbersome and time-consuming procedure of

siphoning water is compounded by ten miles of twisting, narrow road that the nearest fire company must travel to reach the town. Among the significant structures in Thurmond to be claimed by fire was the first depot in 1902; the south side business district in 1922; the Dun Glen Hotel in 1930; the LaFayette Hotel and old Armour Building in 1963; and numerous homes and other businesses. It is interesting to note that few structures have ever been rebuilt after a fire in Thurmond. Generally, the owners simply picked up and relocate. This decries any sense of permanence and undoubtedly helped to foster a pervasive "boom town" mentality during the industrial era.

Many businesses disappeared from Thurmond by the 1940s--some lost to fire and some were just moved elsewhere. In spite of the fires and the adverse economic factors, the C & O continued to operate in the town. Clearly, the railroad did not need the town of Thurmond to survive, but Thurmond, on the other hand, did need the railroad and its jobs to remain a vibrant and growing industrial center.

There was no main street in Thurmond in the early days - only the ubiquitous railroad tracks that symbolized the close relationship between the town and the coal industry. A walk through the town in 1910 would have taken place amidst the continual passage of fast freights and coal drags rumbling across the Dunloup Creek bridge. While two or three engines might sit on sidings with their fires "banked," a like number would be in the shop for repairs, and one might be undergoing inspection on the outdoor pit. Travelers would be waiting at the station for transport to Cincinnati or Richmond, or points in between. The scene was bustling with activity twenty-four hours a day.

In 1910, twenty passenger trains arrived and departed from Thurmond daily, six of which were first class or "fast" trains.[31] As people began to ride motor coaches or automobiles less took to the trains, and after completion of the Glen Jean to Thurmond road along Dunloup Creek in 1920, motor traffic flowed in and out of the area. First, taxis lined up to "ferry" travelers to the Fayette plateau via the present Route 25, then buses began to run this route into the gorge in 1923. The Fayette Tribune noted that: "The Beckley to Fayetteville line has proven a profitable investment and a great accommodation to the public."[32] It must indeed have been a profitable venture because the New River Transit Company began operating nine buses a day round trip from Beckley to Thurmond to connect with scheduled trains.[33]

There were still a number of passenger trains moving through Thurmond in the 1930s, as one former resident emphasizes. "We had six passenger trains a day in each direction, except on Sunday, when locals 7 and 8 didn't run. Five of the trains made

regular stops. Number 1 stopped only to let off passengers from Richmond or Washington and beyond. Number 4 stopped only to let off passengers from west of Ashland [Kentucky]."[34] Despite this busy timetable, ridership on the C&O dropped from 5,127,188 in 1927,[35] to 978,835 in 1933.[36] With the exception of the World War II years, rail travel continued a steady decline through the 1940s and 1950s.

The loss of passenger traffic was not catastrophic to the railroad, since it never accounted for more than about 6% of total revenue.[37] The C & O was predominantly a coal hauling line--though it was not begun as such back in 1867. Collis P. Huntington, first President of the C & O Railroad, did not envision coal "as a major source of revenue for the road."[38] It was only after M.E. Ingalls took the reins as President in 1888 that the C & O made an effort to market the mineral. In 1927, a typical year, 82.55%[39] of all revenue tonnage shipped was bituminous coal. With Ingall's commitment to exploit New River coal, spur lines spread up the gorge. Of immediate importance to Thurmond was the Loup Creek Branch, finished the 10.3 miles to MacDonald in 1892. It ran up the south side along Dunloup Creek, serving several Sewell seam mines in the area. The Arbuckle Creek Branch, opened in 1904, ran west on the south side up Arbuckle Creek five miles to Minden, and it, too, delivered Sewell seam coal to Thurmond.

Tonnage from these and other feeder lines contributed significantly to Thurmond becoming the leading revenue producer on the entire C & O line. In 1911, from 7,000[40] to 9,000 carloads of coal originated at Thurmond each month. Yard clerks kept tabs on coal loaded into fifty-ton hopper cars and shipped on trains ranging from sixty to eighty cars in length, their task to make out way bills on a patent billing machine for coal moving west for industrial use or east to fill steamship bunkers.

Shipments of coal originating at Thurmond were marshalled in the east yard and empties were stored on the south side, where close to 300 cars might be kept, sometimes empties would arrive from the east and go directly out for a run. The process of picking up empties for a mine run has been described as "not unlike a game of musical chairs."[41] In the 1930s, Mallet engines made eight main mine runs out of Thurmond, designated as follows: White Oak, Minden, MacDonald, Whipple, North Side, South Side, Long Horn, and Short Horn Run.

An incredible volume of coal was burned by steam engines in the New River Gorge. Coal drags coming in to Thurmond would have to take on coal at the huge 500-ton reinforced concrete coaling station west of the commercial district. Fully automatic, it had the capacity to coal eastbound, westbound, and Loup Creek Branch

locomotives. The largest engines to pass through Thurmond were the mammoth H-8 Mallets, which had tenders with a capacity of twenty-five tons of coal.[42] Thurmond's coal tower could fuel one in a matter of seconds.

If an eastbound coal drag was in need of coal, it might come up just west of Thurmond's commercial district and stop if it was to pick up a load. The engine would then cut off and a "hostler," or yard engineer, would take the controls and run up to the coaling station while a yard engine delivered outgoing loads from the east yard to the train. En route, the engine would stop and the brakeman would water the tender through one of the water columns in the yard. This took only seconds. The freshly coaled and watered engine would then back down westward and couple onto its load. The procedure was repeated even when the train did not pick up any loaded cars in Thurmond.

Activity in the east yard involved the assembling of coal trains for shipment out of the gorge. Situated in a long narrow strip of bottom land on a bend in the New River, the yard was home to about twenty-five workmen.[43] There was a yard office and a number of support sheds there, many of which still stand. In addition to the east yard's function as a regional assembly and distribution center, it was site of a car inspector's station.

Car inspections were customarily made at the first station enroute to the final destination on the C & O, and for a lot of coal cars this point was Thurmond. Here, a "carman" would routinely check freight cars before they departed with a full load. Thurmond was one of seven inspection points in the C & O coal fields then. Cars are now only inspected at their final destination in Newport News or at a Great Lakes port.[44]

It was the assembling yards that earned for Thurmond the distinction as the C & O's leading moneymaker in 1911. Total freight shipped from Thurmond that year was 3,697,277 tons, or 73,945 loads of standard fifty-ton coal hoppers.[45] This incredible volume made up over 50% of the New River coal field's total production of 7,160,055 tons for 1911.[46] This figure is especially impressive when one takes into account that Thurmond's coal came from a small geographic segment of the rich New River Coal District encompassing the Greenbrier, New River, and Winding Gulf fields found in Fayette, Raleigh, and Greenbrier counties.

A variety of locomotive types were employed to keep coal flowing through Thurmond. By far the most common were the G Class 2-8-0 Consolidations, first introduced on the C & O line in 1890. These combination engines provided the power of an eight drive wheel coupled engine, with most of the weight on the drive wheels for traction. With a total of ten wheels, a large boiler could

be built for more steam capacity and ultimately more power. This combination of traction and strength was the perfect engine for the New River country. G-4s and G-6s were common on the C & O in its first years of operation, replaced by G-7s and G-9s after 1916. For nearly ten years, the G-7 and G-9 workhorse engines reigned supreme over other freight motive power. After the Mallets and Mikados appeared in the 1920s, they survived until the end of steam on the New River branch lines bringing "cuts" of coal down from the mines.

Another type of engine working out of Thurmond for a few years was the slow, side shaft-driven Shay engine. Purchased first by the C & O in 1903, the flexible Shay geared locomotive was designed to pull heavy grades up to 15% with relative ease.[47] Tremendous traction was gained because the entire engine weight was on the small geared drive wheels, making the Shay ideal for the rugged New River topography. It was a peculiar looking animal with an offset boiler and two or three vertical cylinders on one side. They excelled on steep mine runs like the Rend Subdivision and Keeney's Creek Subdivision. The last Shay working at Thurmond was retired in 1922, and the last one on the C & O was taken out in 1928.[48]

The biggest, most powerful steam locomotives in Thurmond were the mighty Class H Mallet articulated compound engines. Mallets built for the C & O were on the cutting edge of coal-fired motive power technology.[49] Named for their inventor, Anatole Mallet, the Mallets started work on the C & O in 1910. From the 1920s until the end of steam, the H-6s, H-7s, and massive H-8s performed the C & O's heavy coal hauling duties. These kings of Superpower steam were actually two engines in one, with a single firebox and boiler providing power to two pairs of cylinders.

Steam engines were repaired in the shop at Thurmond for over fifty years. Thurmond's motley combination of Consolidations, Shays, and Mallets were serviced by the 175-man shop crew. Machinists, pipefitters, boilermakers, electricians, and blacksmiths worked out of the engine house shop area. Shifts rotated at 7 A.M., 3 P.M., and 11 P.M. in the shop to continually service Thurmond's steamers with "light repairs." This designation covered routine procedures like grease jobs and bearing replacements, or more complicated tasks like relining tires and removing air pumps on locomotives. From a peak of about thirty engines in Thurmond in the 1920s, there were but seven or eight H-6 Mallets and two yard engines working there in 1950,[50] a time when diesel technology had matured to the point where coal-fired locomotives were being phased out of service on the C & O.

The C & O held on to steam longer than other major rail lines.

Because it was the world's largest hauler of coal, C & O management felt it was blasphemous to endorse diesel locomotives. As a result, the railroad spent much time and money researching a coal-fired steam turbine engine in the late 1940s. While this was going on, however, the railroad industry was fast converting to diesel power. By 1950, all commercial builders of steam locomotives had switched to diesels, and parts manufacturers were converting to other products. So it was that the C & O found itself virtually alone as a proponent of steam in a world dominated by diesels.

The C & O gave up its defense of steam in 1949, when it ordered 146 diesel engines.[51] Six years later, the railroad was for all intents and purposes a diesel line. With retirement of the last steam engine in the New River region in 1958, the era of steam was over for the railroad. Dieselization was the harbinger of change, and after it arrived there was no longer a need for an engine repair facility in Thurmond. From then on, engines were serviced out of the huge locomotive shops at Huntington or Clifton Forge, a move that led to the conversion of the Thurmond engine house to a car inspection and repair shop in 1963. It continued operating as such until about 1985, when the facility was retired.

At about the same time diesels replaced steam, coal mining was all but over as a major industry in the New River Gorge. Coal traffic continued a steady decline through the 1960s and 1970s, to a point in the 1980s where only about three trains pass through the area on a daily average. The CSX Corporation, successor to the C & O, has since all but pulled out of Thurmond. With little coal originating from the New River region, most branch lines are abandoned, and the east yard is now home to hundreds of "bad order" cars awaiting the scrapper's torch. Where there were once as many as 200 railroaders on the job in Thurmond, there were only two in 1988.

The industrial era in the New River Gorge lasted less than a century. Fayette County mine employment statistics for select years tell the story of its rise and decline:

1895 - 48 mines employing 6,074 miners
1910 - 147 mines employing 13,524 miners
1930 - 79 mines employing 12,692 miners
1950 - 67 mines employing 10,944 miners

Coal tonnage statistics follow the same basic chronology. In 1910, 7,676,420 tons of New River District coal was shipped on the C & O Railway; in the peak year of 1929 (excluding World War II), the total was 14,672,795 tons; in 1960, only 6,271,855 tons went to market.[52] These numbers indicate that coal production in the county and the New River District was at its peak at roughly

the same time Thurmond was in its prime as a railroad town. Clearly, the town's fortunes were inextricably tied to coal.

The industrial era has long passed in the gorge, but its legacy remains in the structures built during those times. In Thurmond, unique as a railroad town, a number still stand. By studying them and their function a clearer picture emerges of Thurmond's role in the age of steam.

Thurmond Extant Railroad Structures

The extant structures in Thurmond can be divided into two categories: railroad support structures and commercial/municipal structures. Railroad support structures there are good examples of the utilitarian construction found in early twentieth century railroad yards. Commercial structures, on the other hand, represent the early twentieth century trend towards less ornamented commercial facades.

Thurmond's railroad support structures lasted as long as they served a purpose--whether it was their intended purpose or an adapted purpose. Unlike other typical late nineteenth century railroad support structures, the Thurmond yard sheds and shanties lacked any ornamentation. Most of these buildings were constructed of vertical board and batten wood siding which makes for a lightweight and easy to assemble structure. Such construction is typically used for farm outbuildings and industrial sheds of temporary utility, seldom is it used for structures built for permanence.

The support structures in the Thurmond yard produced a built landscape that was in a continual state of flux. Frequent shed and shanty relocation necessitated the numbering of these structures, which aided the railroad in its accounting and valuation of property. Many of Thurmond's railroad buildings still bear these numbers above their doors. Dozens of railroad support structures have come and gone in Thurmond over the years, and it would be virtually impossible to record the exact number and location of all built since 1900. C & O Valuation Maps give the best indication of what stood in Thurmond at a given period in its history.

The 1902 Valuation Map of the yard shows six support structures. This number increased to twelve by 1916, and stood at nineteen during the pinnacle of railroad development in 1929. A 1954 revised Valuation Map shows fourteen railroad support structures, only seven of which currently exist.

While a large number of support structures have disappeared in

Thurmond, most of the significant structures do remain. Major railroad structures extant in Thurmond include the passenger depot, engine house, coaling tower, and two water towers. Two major structures have been demolished--the freight depot and the bunkhouse.

Thurmond Passenger Depot

The passenger depot at Thurmond is a two-story rectangular wood frame structure (see appendix for a detailed architectural description of the passenger depot). Most frame passenger depots on the C & O at the time it was built were one-story structures or one-story with an attached signal tower. Owing to Thurmond's importance as an assembling point for coal trains, space was needed for file storage, clerk's offices, the trainmaster's office, the yardmaster's office, the car distributor's office, and the telegrapher's cabin. These requirements could not be met by a standard plan, and hence Thurmond's depot was built in a non-standard design.

As it exists today, the interior of the depot consists of the following rooms, starting at the west end: first is the baggage room, used as a freight room after 1963 when the Thurmond freight depot was demolished; next is the Adams express room, which could have been used as the "colored waiting room" in the days of segregation; adjacent to the express room is the kitchen; then comes the Union News room. The next group of rooms in the east end comprise the public area of the depot. These rooms are the men's waiting room, the ticket office, the women's waiting room, and the women's and men's toilets.

Two lucrative business enterprises located in many C & O main line stations were also found at Thurmond. The Adams Express Company had a contract with the railroad for virtually all of the express business of the C & O, while the Union News Company handled the sale of newspapers, cigars, candy, and sundries in the depot.

Even though there were no Jim Crow laws in West Virginia and no so-called "Jim Crow cars" for blacks on the railroad, it does appear that waiting rooms were segregated since proposed plans for the passenger depot show an area designated as the colored waiting room. Although the "as built" plan does not indicate segregated waiting rooms, a former railroad employee at Thurmond states that waiting rooms were in fact segregated until the 1950s. He believes the express room was sometimes used as the colored waiting room. The express room is located in the approximate space designated for the colored waiting room in the proposed plan.[53]

On the depot's second floor are the offices of the Thurmond yard. At the west end is the yardmaster's office and the conductor's room. Next is the signal tower area housing the dispatcher's office and a file room, which was once a stairwell. Next is the supervisor's office, another file room, a toilet, the car distributor's office, and the trainmaster's office. The last office, on the east end, belonged to the McKell Coal and Coke Company, which was owned by the McKell family interests. Location of a coal company office in the depot is indicative of the symbiotic relationship existing between New River coal companies and the railroad in Thurmond.

According to an 1887 land deed transaction, Captain William D. Thurmond agreed to donate a parcel of land to the C & O for a depot at Thurmond. The railroad was obliged to grade ground for a depot 35' wide, "...said distance being at right angles to C & O track and 60' in length." C & O records indicate the first depot was built in 1897.[54] It initially appears on an 1898 site plan with a platform area and depot approximately 130' x 40', with the depot alone measuring 115' x 20'. This depot and an office building burned in 1903, replaced in 1904 by the current structure (which opened in 1905).

In 1914, a 15' extension was built on the east end of the existing building, causing the first floor interior space to be repartitioned. As a result, the baggage room and women's waiting room were enlarged, and the men's waiting room shortened.

It is interesting to note that despite these improvements, in 1917 a local newspaper suggested that the C & O replace the depot. This article said the depot resembled Noah's Ark, and it was an unsanitary and dangerous waiting place which "loafers" used as a "place to sleep off 'night befores.'"[55] Within the next month the same paper announced that a new depot would be built. It never was constructed, and no evidence has been found that suggests the C & O ever considered it.

In 1931, a steam heating system was installed in the depot and freight house. Steam originated from the boiler of a retired G-4 or G-6 Consolidation locomotive placed in the southwest corner of the engine house. The entire railroad complex in the main Thurmond yard was heated by this hand-fed coal fired boiler.

Installation of steam lines in the depot made the four original double-flue and the one single-flue brick corbel capped chimneys obsolete. A specification on the 1931 steam heat plan calls for the chimney openings to be covered with tin.

The last renovations to the depot were done in 1941. Toilet

facilities were improved, new tile and wainscoting added, water closets redone, and the wood partitions were replaced with metal. After these improvements, little maintenance was performed on the structure before its sale to the National Park Service.

In the spring of 1988, a small electrical fire damaged the depot's first floor elliptical ticket window area. Fortunately, the local fire department responded in short order to put out the fire before serious damage was done.

The CSX Corporation kept an office in the depot building until 1988. Currently, the depot serves as a flagstop for Amtrak's tri-weekly Cardinal passenger run from Chicago to New York.

Engine House

The construction of steep branch lines up the New River gorge in and around Thurmond made it necessary to build an engine repair shop there. Since large engine repair facilities in Clifton Forge and Huntington provided "heavy repairs," only an inspection and "light repair" shop for local engines was required at Thurmond. Whereas engine repair houses are traditionally round or polygonal-shaped to accommodate large numbers of engines coming off a turntable, Thurmond's shop is rectangular in design. This shape was said to work well for a facility that serviced only three or four locomotives at a time or in an area where space was at a premium - both of which applied at Thurmond.[56]

Thurmond's wooden, rectangular engine house measures 150' x 66' with two outshoot additions built on the south wall. A low pitched gable roof is topped by two monitors, which mark the division between the original structure and a later addition (see appendix for a detailed architectural description of the engine house). The interior of the engine house now consists of the general foreman's office, the crew office (a.k.a. the "bullpen"), the machine shop area, the welding shop, the tool room, toilet and washroom facilities, two sets of shop tracks, wheel storage tracks, a blacksmith shop, and a steam boiler and coal storage area.

In the C & O Annual Report of 1897 there is mention of the construction of an engine house at Thurmond. A 1902 railroad Valuation Map of Thurmond shows a depot, turntable, and a structure labeled "roundhouse" with dimensions of approximately 76' x 32' (interestingly, the extant engine house is still called the roundhouse by railroaders and locals). On the map, the roundhouse is located on the river side of the tracks east of the water tank. Neither the dimensions nor the location matches that of the current engine house, although there is no record of a new

building being constructed in Thurmond.

The original portion of the current engine house (measuring 150' x 65') appears positively on a 1905 plan of Thurmond. An outshoot located on the east end of the buildings south facade was labeled as the boiler room on this plan.

A 99' x 65' extension was added onto the west end of the engine house in 1921. Sometime afterwards, the engine doors were enlarged from 15'-6" to 18' to accommodate the new and larger Mallet engines, which stood up to 16'-7" tall.[57] With these improvements, the engine house could service at one time four of the largest engines in use through the gorge. The extension of the engine house set the stage for a number of improvements to the facility in the 1920s. The boiler area was probably moved to its current location when the extension was built, because in 1927 the former boiler room was labeled as the general foreman's office.

A 6' x 46' frame outshoot west of the general foreman's office shows up on the 1929 Thurmond Valuation Map. This appendage is labeled as the white employee's washroom.

In 1963, the interior of the engine house was again altered when the Car Department merged with the Mechanical Department and the facility was converted to a car inspection and repair shop. Wheel storage tracks, jacking pads, and wheel hoist pits were installed at this time. Before these alterations, most of the interior work space consisted of the two shop tracks running east to west, the tool room, the machine shop, and the work area with a total of four working pits beneath the tracks. In addition, there were two office rooms on the east end of the building, and washrooms on the south side.

On the extreme southeast end of the engine house was the entrance to the general foreman's office. Formerly, this door contained a glazed panel with "General Foreman Office" etched on it. Upon entering the office, there is a desk in the center of the room that was once used by the crew dispatcher clerk and the general foreman. Responsibilities of the general foreman centered around the operation and repair of the engines assigned to Thurmond. He would perform such duties as complete reports, distribute work assignments, hold employee investigations, and contact other points on the Hinton Division via the company "HRT" telephone line which ran between Hinton, Raleigh, and Thurmond.

A crank-type yard telephone also connected the shop to the coaling tower, the east yard, and the depot. On the south wall was a clock that kept the correct Eastern Standard Time. With the advent of Daylight Savings Time after World War II, this

clock showed that time when applicable. Train crews stayed on Eastern Standard Time for about two years after Daylight Savings Time was introduced.

The crew dispatcher clerk had a typewriter at his desk, and a number of storage bins to keep car bills and records of cars. On the south wall of the office were files with blueprints of various steam engines in use. Storage bins lined the west wall and held all records of employment, C & O Board of Inquiry records, and general information about the yard and shop. On the east wall was a coat rack, a bench, and a wooden storage cabinet. The room to the west of the office was first used as a bathroom, then for storage, and as a shower area and furnace room after 1976.

Directly north of the general foreman's office is the crew office, or bullpen, where work crews' schedules were assigned. A row of chalkboards lined the inside west wall. Here is where the train crews were made up and posted according to yard 1, 2, or 3 and crew pool 1, 2, 3, etc. Next to the yard/pool boards was the engineer extra list and the fireman extra list. In this room there is a tall counter and a bench just inside the east end-opening door. Crews came in here to check their status regarding work. Extra men filling in during vacations, sick days, and on days off sometimes waited for two or three days to receive word on assignments. Often regular posted crews had to wait a day before they were called out on a mine run. In these cases, the men might stay in the bunkhouse if they did not live in the area.

If the coal business was good and mines were producing at or near peak capacity, crews would work a shift, sleep eight hours, and go back out on a run. Extra men had to be prepared to work around the clock, at about an hour's notice. They received no benefits, and work was never guaranteed.

Along the south wall of the bullpen was the cabinet that held the worker's time cards. Through the window opening along this wall to the shop the cards were passed to the general foreman, who recorded the time workers arrived and departed. The east wall counter was where the enginemen and firemen reported for work. On the north wall was the worker's age roster (seniority list), an iron basket for bulletins, and a wall-mounted blueprint of a steam locomotive. Along the south wall beside the door to the general foreman's office is a desk put there in 1926 by shift foreman Comer Gray, whose name and date is inscribed on the bottom of the desktop. Above the desk was a clock set for Eastern Standard Time.

Upon entering the shop area through the door from the crew office there is a small shed structure to the south, attached to the

crew office. This was the engine bottle washing shed, where a laborer would wash out the bottles for the drinking water cooler on diesel engines. This interior structure was not present at the height of the steam era.

Adjacent to this area to the southwest was a water testing station for sampling steam engine water. This was done because too many impurities or a high algae count in the water might cause permanent damage to the boiler. If either occurred, the engine was run down to the coal tower and steam was blown off two or three times through a stopcock on the side of the engine. Fresh water was then added in the tender. In the effort to avoid unnecessary and costly repairs, steam engine water was treated either at the water towers on the north side of the tracks or directly in the boiler with a chemical additive.

To the northwest of the water testing station was a steam gauge testing device where a system of weights was used to check the reliability of engine gauges. This small but important procedure was essential to the safe operation of steam engines. Indicator hands on the gauges were tested for accuracy here and then adjusted if incorrect.

The general foreman's tools and reports were stored in the small room that is attached to the foreman's office, against the south wall of the shop area. It originally connected with the storage area to the west of the general foreman's office. In later years, this area was converted to a locker room and shower.

The outshoot west of this room originally was used for tool storage and last used for a washroom and toilet facilities, as evidenced by the commodes and mirror frames that are still attached to the wall. At the west end of this structure there was a shower. Control valves for the shop water system were here, also.

The long outshoot running along the south wall of the engine house was the shopmen's washroom. Above the door is a sign reading "Shopmen" that is still partly visible. This was for white employees only.

The gray prefabricated structure west of the washroom entrance was the electrical shop. It was moved here in the 1960s from an unknown outdoor location. Originally, this was an open work area with just an electrician's bench occupying the space. The bench is still in place.

Immediately to the west of the electrician's area was the site of the welding shop. Inside this walled area there was a Lincoln Arc Welder. This, too, was originally an open work space, with

the existing partitions probably added in the 1960s.

Adjacent to the welding shop area is the tool room. This interior shop is 12' high x 16' deep x 33' long. Though the tool room now consists of two segments, one with a gable roof and the other with a flat roof, the original tool room was housed under the gable roof section only. Proof of this is the ghost mark of a sign above the gable roof which once read "TOOL ROOM." Also, the west side of the gable roofed section matches the east side of the flat roofed segment. Clearly, the original tool room wall was moved east under the flat roof, probably in the 1960s.

Originally, the tool room was the only enclosed area in the entire shop complex. This enclosure was here to keep the shop tools secure and to insure that workmen did not just grab a certain tool and make off with it or lose it. When getting a tool, the borrower was required to give the tool house attendant a brass chip in exchange for the necessary implement. With this method, the worker was responsible for a specific tool until it was returned.

After dieselization, the tool room was converted to the shop storeroom following demolition of the former storeroom (located in the Thurmond yard). The flat roofed addition was built on the east end of the tool room structure at this time. Lantern batteries and diesel engine supplies were stored in the enclosure, and in the east end there was an office for the storekeeper.

West of the tool room, attached to the engine house's south elevation, was a building addition used as the "colored" worker's washroom. This outshoot was the first part of the engine house to deteriorate, according to a former machinist who came to Thurmond in 1950.[58] Most of the washroom is now gone, and part of it lies in ruins on the riverbank to the south side of the shop.

Sometime in the 1960s or 1970s, there were plans for the repair of this sagging section of the engine house. A group of railroad carpenters was dispatched to Thurmond and they jacked up the support beams inside the structure, cut out a section of the beams, and installed chocks in place of the sawed-off members. Before the job was complete, however, the detail was moved to another site for a bridge repair job.[59] After this attempt, the railroad did no more maintenance on the structure.

The machine shop area began just beyond the tool room's west wall, extending from there to the stationary boiler/coal storage area in the southwest corner of the building, and up to the shop tracks. Here is where the machinists and their helpers would

work to repair or fabricate machined parts for the steam engines stationed at Thurmond. Machines in the shop included: a large wheel lathe, an axle lathe, a planer, two drill presses (one of which was moved to the east end of the shop and remains there today), a hydraulic press, and a grinder.

A large part of the original machine shop area now contains a series of five wheel storage tracks that bisect the main shop tracks, and a wheel hoist pit. These were installed in 1963 and used by the Car Repair Department for car wheel storage and repair until the 1980s. Whereas the in-fill between the rails is now grit, this area had an all concrete floor before 1963, and probably a wood floor before that.

The engine house floor plan has undergone many changes through the years. For a better idea of the division of space and the evolution of the floor plan, see accompanying HAER Drawing, Number WV-42, sheet 6 of 9.

To the west of the machine shop there is a stationary air compressor used in later years as a power source for various machinists' tools. It remains in place, housed inside a small panel shed. The compressor is an Ingersoll-Rand Type 40 model, and its pressurized air line runs to the air tank just outside the northwest corner of the engine house. Originally, machines in the shop were powered by a steam-driven belt and pulley system, which was removed many years ago.

To the east of the air compressor is a grinder that was once part of the machine shop appurtenances. Just south of it was the blacksmith's shop. Two features of the blacksmith's shop that remain are a circular forge and a rather unique anvil made of wooden railroad ties and covered with an iron face plate. The gas powered, coal-fed forge still sits next to the stationary steam boiler. From here, the shop blacksmith would manufacture or re-tool iron parts as needed for engine repairs.

There is an oil vat against the south wall of the shop which was used for lubrication of railroad car parts. This rectangular metal box was installed by the Car Department in the 1960s.

In the extreme southwest end of the shop is the stationary steam boiler and a coal storage bin. This boiler, installed in 1965 to replace an earlier one that had been in place since at least the 1920s, is from a circa 1880s steam locomotive (probably an Alco G-4 or G-6 Consolidation engine). It was brought from the C & O's Newport News, Virginia yard and installed here to provide steam heat for the Thurmond complex. Ventilation of the smoke was via a metal smoke stack that pierces the engine house roof. Buildings originally heated by this boiler were the engine house,

the depot, and the commissary. Sheathed in asbestos, this boiler is in a seriously deteriorated state. (There is a large hole in the engine house roof directly above the boiler which is in need of repair.)

Water for the boiler and the rest of the shop came from the water tank on the north side of the tracks in through a pipe along the wall in this area. The old water and steam lines still run through the facilities here.

A large quantity of water was needed in the engine house because the boilermakers were assigned to wash out locomotive boilers as a part of routine engine maintenance. Generally, the men on the third shift (11 P.M. to 7 A.M.) did this work.

In the last days of steam, coal for the boiler was supplied by a coal hopper car brought in the shop and placed at the west end of the south track by the engine house door. This precluded the use of this end of the track in the winter months. The unloading of coal was done when the bottom hopper was opened, spilling the coal onto the floor. A laborer would shovel the coal from the floor into the coal bin west of the boiler. It was the job of the laborer to keep the boiler fired with coal.

Early plans of the engine house show a coal track running from the main line west to east to the west side of the shop. Coal was offloaded outside the engine house and brought into storage through a door where the coal bin is now located.

The original floor plan of the building shows two east-west shop tracks running the length of the engine house. Over both tracks at either end of the shop was a metal smoke jack and underneath each one was a pit area running nearly the length of the floor approximately 3' deep. Although it was standard at the time of initial construction that pits have convex concrete floors and concrete walls, the pits in the Thurmond engine house are made of wood and have flat bottoms.[60]

Old smoke jack openings are visible now as four panel-covered sections in the engine house roof. Two types of smoke jacks were standard when the engine house was built. One was a telescoping drop section type that would fit down closely over the stack of the locomotive, and the second type was a large flaring stationary section with a much larger base than the telescoping type.[61] The smoke jacks in the Thurmond engine house were the flaring stationary metal type, measuring about 8' x 4'.[62]

When the Car Department moved its operations into the engine house, a number of changes were made to building's floor plan. The west portion of the work pit under the south shop track was

filled in with grit, and a wheel hoist pit and jacking pad station was installed on the north shop track. Two wheel storage tracks now bisect the north track and there is a concrete wheel removal pit at the west end. The original wood floor in the west section of the shop track was removed and concrete put in its place. A jib crane was put in to expedite the removal of car wheels as well. At some point, possibly when the Car Department came, the pit under the north shop track was removed and the floorboards used to cover the resulting hole at track level. Before these alterations were done on the shop, the engine house looked much the same through its first sixty years of operation.

It appears that the layout of the shop at Thurmond corresponded with a general overall plan for comparably sized engine houses. A working steam engine shop at Cass Scenic Railroad, in West Virginia, is laid out in the same floor plan with two shop tracks running the length of the house, and the machine shop, tool room, and offices dividing the remaining space on one side of the shop tracks.

Thurmond's shop was not especially unique as a railroad maintenance facility. It was laid out for convenience and utility. The general plan of the day called for the shop facility to be in close proximity to auxiliary structures to allow coal, water, sand, oil, and waste to be taken on or discharged by an engine coming or going from the engine house. It was recommended that no more than two engines at a time be serviced on either track, to expedite the movement of engines through the facility. Engine house doors swing outward as was common, and they exceed recommended dimensions for size.[63] Work going on here could be seen at other comparable "light repair" shops up and down the C & O line. What makes Thurmond's shop most historically significant is that it survives and still contains remnants of Steam Age technology.

Mechanical parts on a steam engine, like valves and crossheads, undergo great wear and tear from the reciprocating drive motion, and they require continuous maintenance. Consequently, every time a steam engine came across the inspection pit in the yard east of the shop at Thurmond, a machinist would be on hand to look for potential problems. He used a hammer for checking the wrist pin and nuts to insure their tightness. If a cotter key was missing, it would be replaced, any excessive wear on the main drive rod would be noted, and bearings would be checked. This was all done daily and listed on an engine report submitted to the general foreman.

Four engines could be worked on in the shop at any given time after the extension of the engine house in 1921. Each of Thurmond's engines underwent a monthly inspection which might

take two days, and a six month and an annual inspection which would be more extensive. Monthly and six month inspections were performed at Thurmond, but engines underwent their annual checks in Huntington. On an annual inspection, the engine and tender would be separated and the connecting draw bars would be whitewashed to see if any hairline cracks were present, and the side rods would be removed and inspected.

Inspections at Thurmond began with a stop at the inspection pit underneath the inspection track (running just north of the engine house). The pit is still there, converted to a diesel fueling port in later years. A machinist on the pit would check the engine over for major problems. The hostler then ran the engine down to the coaling station where the fire was knocked and the ashes shaken out. After giving the engine running gear a hot water washing, the engine was brought back for inspection and repairs.

Generally, the next shift would begin the inspection. Assignments handed out by the general foreman might range from valve grinding and packing to performing boiler checks, or anything else that the engineer reported. Tasks like grinding of valves was done on the steamer's monthly inspection or more often, if needed. Certain tests were done to the engine to make sure it was operating problem-free. "Thumping" was one such test where the throttle was opened with the cock closed (to keep the engine from moving), and the reverse bar pushed forward and back to detect any steam leaks. A job like this would be done during the day.

If "running repairs" were done, workmen would not get a specified lunchtime, because the engine had to be back in service as quickly as possible. If "dead repairs" were in order, the men took a thirty minute lunch since time was not critical.

Some work, like boiler inspection, took a whole twenty-four hours to perform. This process began with a boilermaker washing out the inside of an engine boiler. The third shift (11 P.M. to 7 P.M.) usually washed the boiler and then the next day shift boilermaker would inspect the stay bolts, crown sheets, and other boiler parts. If the engine came into the shop at 7:00 in the evening on a monthly inspection it would be ready to go back out by 7:00 the next evening.

One of the repairs performed on the engines would be the grinding of cracked steam cylinders, a process whereby metal pins were inserted in the cylinder. A heat source kept the cylinder hot while a machinist would braze the metal.

Other repairs involved working underneath the engines on binders.

This was done from the pit by use of an air jack, the binders between wheels and wheel trucks being checked and repaired as needed. Brake shoes were changed and locomotive springs were realigned in this way, also.

Locomotive wheel repair was another important part of the work done at the engine house. The 67" diameter locomotive wheels on the Mallets had to be turned and re-shimmed every two years. To accomplish this, the wheel was heated in order to expand the old tire and make it slip out more easily. Then, the new tire would be put into place, tightening around the rim once it cooled.

A four-wheel jack (hydraulic or air-powered) was situated in the work pit between the tracks to allow locomotive wheels to be taken off and the boxes removed. This was accomplished with a sliding rail that fit under the wheel, allowing a worker to take out the wheel. These rails may still exist underneath the false floor installed between the track rails in the 1960s.

Other work done in the engine house included changing engine brake shoes and greasing rods. Both of these jobs were done on a frequent basis because the wear on these steam engine parts was great.

Laborers were responsible for watering the tenders before the engines came into the shop. Coaling, sanding, and cleaning the ash pans was their responsibility, too, after they left the engine house.

Heavy repairs were not done in Thurmond. Hinton Division engines were sent to Huntington for these. Nevertheless, often a section of the locomotive had to be removed for repair while at Thurmond. For these tasks two chain hoists were used, one at the east end and another at the west end of the shop. Each hoist is built on an arc-shaped track with a radius of approximately 18', enabling the apparatus to be swung around for use on both tracks. The east end hoist is more firmly braced and could consequently lift heavier locomotive parts such as air pumps.

Located at the west pit on the north shop track are two jacking pads and a wheel hoist pit installed in 1963 when the Car Repair Department combined with the Mechanical Department. The jacking pads measure 15' x 4' and have an east-west orientation running with the north shop track. By use of an air jack, the wheels of freight cars being repaired at Thurmond could be lifted and removed. In the procedure, the car was jacked up by the air jacks located on either side of the car. Then, the wheels were loosened, rolled out, the jib crane located in the northcentral part of the shop was swung over, and the truck removed. On these perpendicular narrow gauge rails there was mounted an apparatus

for wheel repairs which could be rolled around as necessary.

The wheel hoist pit is located between the jacking pads. At the extreme west end of the engine house between the shop tracks is a winch-like electric car puller used by the Car Department to move cars through the shop during inspection and repairs. It operated with a heavy rope tied to the cars.

Another part of the car repair facility installed after the end of steam was an air hoist for unloading wheel cars. A dolly was brought up to the tracks to receive the wheels being unloaded.

Before electric floodlights were installed in the work pits, men inspecting the engines first used aladdin-type open kerosene lamps, and then carbide lights to see the underside of the engines undergoing repair. The large windows of the engine house and whitewash on the walls allowed more light into the shop area during the day.

The Car Department continued to perform car inspections and repairs in the engine house until 1985, when the facility was retired by CSX. In 1988, the National Park Service was negotiating to purchase the structure.

Coaling Tower

A New York construction firm employed twenty-five men to build the $85,000 coaling tower at Thurmond in 1922. It was designed by Fairbanks, Morse and Company of Chicago, a leading manufacturer which designed and built over 700 coaling stations.[64] This huge reinforced concrete model was fully automated, built to provide coal and sand for up to four steam engines in a matter of seconds. It still stands west of the engine house.

Two similar coaling stations existed on the C&O line when this one was erected--one in Indiana and the other in Virginia. After Thurmond's tower was erected, a local newspaper optimistically reported that "the station...will be entirely enclosed so that there will be no annoyance from dust created by the dumping of cars."[65] Instead of minimizing the dust in Thurmond, the facility more than likely led to more coal dust in the air.

Located immediately west of the coaling tower at trackside is the sand drying and blowing house. It is a rectangular reinforced concrete structure with a reinforced concrete gabled roof, chamfered corners on the walls, and with one door located on the south facade (see appendix for a detailed architectural description of the coaling tower). As of this writing, the

structure is in a serious state of dilapidation.

The coaling tower together with the sand blowing and drying house performed a necessary function in the operation of Thurmond's steam locomotives. It was here that engines would "coal and sand" as necessary. Once vital to the operation of this steam rail yard, these structures are now remnants of a past technological age.

Before coaling could commence on any engines, the coal tower itself had to be filled. This was begun when a bottom unloading coal car was pulled to the middle bent of the coaling tower to dump its cargo into a hopper 22' below ground level. Before the coal got to the bottom of the hopper it was transported by a conveyor belt to a Jeffrey Mining Company Single Roll Crusher. An electric motor housed in the southwest bent of the coal tower powered a drive shaft which turned a belt supplying power to the coal crusher. The crushed coal then went to the bottom of the hopper where buckets rigidly riveted to conveyor roller chain plates scooped it up. Fairbanks, Morse and Company manufactured the chain of high grade steel, and either of two chains could support an entire line of buckets.

These buckets, turned by an electric motor located in the monitor, dumped the coal into a feeder chute. Originally, a manual flap in this chute determined which one of two bins received the coal. The larger bin was roughly twice as big as the smaller bin. If the flap was open the coal went into the larger bin; if it was closed, the coal was moved along the chute by a shaker screen and then dumped into the smaller bin. An additional chute was added later. With the new chute, all the coal would go into the smaller bin if the flap was open.

In 1935, non-segregating withdrawal chutes were installed in the Thurmond coaling tower to prevent the separation of slack coal from nut coal.[66] The Mixing of slack and nut coal together was probably more economical than having to process the coal and use just one size, but the main reason for using slack lies in its properties. It is a soft, fine coal common to the Sewell and Fire Creek seams found in the New River Gorge area. As a general rule, hard coal produces more smoke than fine varieties. High in carbon, soft coals give the best results in steam because they burn "smokeless."[67]

Early on, slack was regarded as a waste product unfit for use in steam engine boilers because it clogged the flues and wasted through the smokestack. It became a marketable commodity as improvements in boiler technology made the burning of fine coal more desirable than high volatile lump varieties.

The Thurmond coaling tower featured eight undercut gates. Each gate had a counterweight apron hood that easily deflected the coal into the tender as a brakeman operated the mechanism from the top of the tender.[68] Opening and closing of the apron was done with a counterweighted chain and check chain.

All of the Loup Creek engines were coaled on the south side of the coaling tower, while the main line engines were coaled with the north elevation overchutes. Generally, engines were sanded after they were coaled.

Sand is important to the railroad when it is conveyed from an engine onto the track to improve traction and stop wheel slippage. At Thurmond, the sanding process began when a railroad car filled with wet sand was offloaded into the seventy-five ton capacity sand storage bin west of the coaling tower. The sand was shoveled into a drum stove dryer located in the sand blowing and drying house, where an iron grating stove liner kept the wet sand from the main body of the stove and formed a hot air space to allow moisture to escape.[69] As the sand dried, it was blown into a storage bin in the coaling station through the elevating pipe running along the exterior stairs of the tower. (It was a common practice to make the radial bents of a sand elevating pipe out of manganese steel in order to withstand the wear incurred by the constant blasting of the sand.[70]) From the storage bin sand was dispensed to waiting engines by sand valves attached to a north and south side overchute.

Efficient steam technology was dependent on the quality and accessibility of coal. Without a cheap and ready supply, a railroad could not continue to operate efficiently. Likewise, a locomotive coaling station was all-important because it fed the coal to the engines. In 1907, the American Railroad Engineering Association (A.R.E.A.) listed the four major functions of a coaling plant. According to the A.R.E.A., it should:

1. minimize delays while coaling.
2. minimize delays to the coal cars.
3. minimize the cost of handling coal.
4. accurately measure the amount of coal delivered.[71]

With the construction of the automated coal dock at Thurmond, coaling and sanding time was reduced to a matter of seconds. By minimizing delays, the railroad naturally minimized their time lost to coaling - ultimately making more money by moving more coal.

A brief mention of coal tower evolution puts the Thurmond structure into proper perspective relative to its time and technology. In 1907, coal was loaded by means of a crane, by

elevated coal cars, or with automated equipment. The use of a platform and hand crane was common for small yards, and sometimes coal was loaded into elevated bins from the sides of coal cars on elevated tracks. At some yards, the elevated bins had to be reached by tracks at an incline steep enough to require a trestle power hoist to pull the cars up to the loading bin height. Also in use were cranes that transported coal from the cars by swinging it over to the tenders. Other methods of the day used automated technology such as the patented Holmen bucket, a link belt conveyor, or a Robbins belt conveyor.[72]

Coaling towers in 1911 were constructed from one of three different materials--wood, steel, or concrete. Wood was used in the construction of the first coaling stations. It was inexpensive and desirable for coaling towers that had a capacity of 200 tons or less. Wood towers were thought to be of a more temporary nature than concrete or steel.[73]

A 1909 source states that few concrete coaling towers existed, primarily because they cost on the average 40% more than the same capacity tower of a timber trestle design.[74] The chief advantage of steel as a construction material for coaling towers is that a conical shaped bottom could be easily fabricated to allow the coal to move around every time the overchutes were opened. Concrete and steel coaling towers had an added advantage of being fireproof, which wood ones were not. This minimized the probability of spontaneous combustion, always a problem where a large quantity of coal is stored in a covered container.[75]

Concrete and steel are more permanent building materials than wood, and therefore more cost effective on a long term basis. Average insurance costs for a concrete coaling tower was 1/4 of the cost for a wooden tower, and this enabled many rail lines to justify the increased expenditure for a concrete coaling tower.[76]

Steel towers were not erected in large numbers by the C & O, and there were none on the Hinton division before the 1940s. Wood coal docks were being built on the C & O as late as 1925.[77] Concrete was the building material of choice for large permanent coaling stations. By erecting a concrete structure at Thurmond the railroad in essence made a commitment to maintain an active presence there until the end of steam.

No one could have known in 1922 that the end of the steam era was fast approaching. The coaling tower, built to last much longer, was used for only thirty-eight years before it was retired. It remains today only because its concrete construction minimized the tower's scrap value and added to its potential demolition cost. Although the metal gates and aprons have been removed, the rest of the structure is still intact.

Dieselization replaced the last steam engine in Thurmond in 1958, rendering the coal dock obsolete. Diesel engines continued to sand at the coaling station until 1960, when a preassembled 45' sanding column was delivered to Thurmond from Russell, Kentucky. This tower has a sand storage capacity of 235 cubic feet (8.6 cubic yards). It still stands west of the shop, part of a complex that once included a sand storage bin, a sand drying house, and a sand blowing apparatus.

With the retirement of the coaling station, the end of an era was at hand. The technological turning point from steam to diesel rendered a majority of extant buildings in the yard obsolete, and sounded the death knell for Thurmond as a railroad town.

Water System

An abundant water supply was necessary for the successful operation of any steam era railroad. Heavy freight engines used an average of eighty gallons of water per mile[78] and as many as thirty local engines relied on Thurmond's water to fill their boilers at the height of the steam age. Two such engines common to the Thurmond yard in the latter days were the G-9 Consolidation and the H-8 Mallet. The G-9 had a capacity of 7,000 gallons and the H-8 a capacity of 25,000 gallons of water. It is easy to see that a lot of water was needed at Thurmond, but the exact quantity depended on five factors: the number of engines in the yard per day; the size and water consumption of the engines; the capacity of the engines' tenders; the distance to the next water station; and any other needs for water in the yard.[79]

Water quality was just as important to steam locomotives as quantity, since the purity of boiler water affected how well and how long a steam engine would last. Railroads often treated their water to insure the proper mineral balance and to counter the effects of impure water.

There were three major problems caused by impure water. First, scale might build up in the boiler. Scale consists of deposits of carbonates (lime and magnesia) formed when pressure in the boiler is above 60 pounds per square inch.[80] Scale was a continuous problem for steam engines, because of the tremendous pressure in their boilers. An H-8 Mallet, for example, operated at 260 pounds of pressure. An accumulation of scale could result in leaky flues and corrosion of the boiler seams, which might lead to a nightmarish boiler explosion. Far more commonly, it simply reduced a boiler's efficiency by interfering with heat transfer from hot boiler surfaces to water. Regular engine

inspections included the cleaning and washing of boilers to help eliminate scale.

A second problem caused by impure water was foaming in the boiler. Alkali salts or sulphates remaining in the water after boiling often resulted in foaming, which led to delays on the road. Foaming water made it impossible to be sure of the water level in the boiler, and if an engineer was unsure of the level he had to stop his engine immediately and determine as quickly as possible whether the crown sheet in the firebox was still beneath the water level. Most boiler explosions were the result of crown sheets rupturing due to low water levels. Water carries heat energy from the crown sheet, and when it is not present the crown sheet heats, softens, and ruptures under the boiler pressure. This condition was alleviated with the proper chemical treatment to prevent foaming.

The last major problem with impure water was the buildup of mud, sand, or other organic matter in the water. These sediments could harm boiler tubes, and cause major mechanical malfunctions, and to insure that this did not occur, a mud drum was built into the bottom of the water storage tank to filter the water before it was used.

The first water tower at Thurmond was erected in the 1890s, initially appearing on the C & O Valuation Map in 1898. With an approximate diameter of 25', it was most likely an 1892 C & O standard 50,000 gallon wood tank. Between 1902 and 1914, a second water tank was built east of the first one. This tank was also constructed of wood, 24' in diameter and approximately 65' high. It appears to be similar to a 100,000 gallon capacity wooden tank often found along the Pennsylvania Railroad at this time.[81]

Common woods used for water tanks in the central and eastern United States were cedar and white pine. A cedar tank was expected to last an average of thirty years, and a white pine tank would last twenty.[82] There is no record of the type of wood used to build the water towers at Thurmond, but it is likely that they were made of cedar or white pine.

In 1914, the first of two steel tanks was put in service in Thurmond. This tank evidences a general shift at the time from wood to steel tanks. In 1899, steel tanks were thought to be too expensive and the steel plates necessary for construction too difficult to obtain.[83] A steel tank at this time tended to cost about 120% more than a tank constructed of white pine.[84] By 1912, steel prices were thought to be inexpensive, but wood tanks were still popular.[85] By 1915, good timber for water tanks was difficult to obtain and the cost for a steel tank and a wood tank

were roughly the same.[86]

A great advantage of steel water tanks was that they often had certain features that made them self-cleaning, features that are found on the 1914 steel tank at Thurmond. One example is that the decided slope of the elliptical bottom allows sediment to flow into a center mud drum. Sediment settles at the base of the mud drum and is then removed through the blow-off valve, also located at the tank's base, allowing the tank to be cleaned without taking it out of service.[87]

Steel tanks had decided advantages over wood, yet, they were not without flaws. The use of steel created two new maintenance concerns about water tanks: 1) steel tanks had to be painted inside and out every four years, and 2) water in a steel tank had to be more closely monitored because of steel corroding salts.[88]

Built to replace the first wood tank, the new steel tank at Thurmond was not erected on the site of the first one--it was located west of the second wooden tank. The foundation of the tank was constructed by the C & O, but the 100,000 gallon tank itself was built by a private contractor.[89] It is elevated with a height of 53'-10" from the base plate to the roof. A roof tops the structure, supported by four steel legs each with diagonal cross bracing. Underneath the center of the tank is a 4' diameter mud drum, resting on a 6' square concrete base. Two tiers of curved horizontal steel panels riveted together form the drum. An old photograph of the tank shows a water level indicator scale on the drum face. The 4' diameter mud drum is constructed from six steel panels, each 4'-6" high. Above the base of the mud drum is the blow-off valve for emptying or lowering the water level in the tank.

It was considered desirable to have two tanks in the same rail yard rather than one large tank with the capacity of two tanks, because two tanks insured a constant supply of water in the event of a blockage in the system or freezing of the pipes.[90] Since wooden tanks had to be emptied and cleaned once a year, a second tank was more than a luxury for a busy yard like Thurmond--it was a necessity.

In 1927, a new steel cylindrical standpipe tank was built to replace the second wooden tank erected before 1914. Both steel tanks were attached to the accompanying pump house. Maps of Thurmond show four water columns in the yard at the time, in addition to the two steel water tanks. The 53' high, 201,000 gallon capacity standpipe tank built in 1927 rests on a concrete base and has an attached concrete shed used to house a pump, chemicals, and a heater. The tank was manufactured by the T. Graver Corporation.

Expansion of the water system at Thurmond reflects the growth of the railroad yard. Additions of new and larger water tanks and more water columns are evidence of the increasing number of engines plying the Thurmond yard between 1898, when the first water tank was installed, and 1927, date of the last improvement to the water system.

Small rail yards with only one or two tracks could have engines watered directly from a water tower, whereas large yards would use a number of water columns located throughout the yard. By 1902, there were two water columns in place at Thurmond, and their locations match the customary practice of one standpipe at either end of the yard. Each water column serviced one of the two main lines existing at Thurmond at the time. One of the water columns was located across from the water tanks, and the other one was positioned slightly east of the depot. The standard diameter of the pipes leading from the tanks to the columns was six to eight inches, according to an 1891 reference. This diameter was suggested "so as to reduce the loss of head by friction and enable the water to reach standpipe" (or water column).[91]

In 1914, a water column was added northwest of the passenger depot. This column serviced passenger trains on the C & O westbound main line track from a position where a train boarding or letting off passengers could quickly take on water.

Common features of standpipe water columns included vertical and lateral spigot movement to enable different sizes of locomotive engines to be serviced. It was also common for standpipes to have automatic drain features for the part of the column above the frost line, and an auto lock on the swivel turning device.[92]

Watering from a standpipe system was a two step procedure: 1) one chain was pulled to swing the spigot forward and down, and 2) a second chain was pulled to open the valve. Taking water from the water column to the locomotive tender was a task for the brakeman. He would lower the spout down by way of a pull chain to the engine tender and allow the water to flow to a predetermined level.

In order for the railroad to get water from the New River to the tanks on the water north side of the tracks a pump house was built east of the depot along the river before 1916. The 16' x 37' frame pump house has a rear ell appendage that is built out over the river, and in the ell was a pit that measured 14' x 16' x 25'. Steam provided the power for the unit's pump.

A chemical house used to store water treatment chemicals was

located to the west of the 1914 water tank. This 16' x 20' frame structure held caustic soda and other chemicals which were mixed into the water for purifying in the tank. This structure was removed in about 1985, and its foundations still exist.

A 1937 Water Station Diagram for the Thurmond yard shows a pump house, two steel water tanks with a combined capacity of 301,000 gallons, five water columns, and water lines from four to twelve inches in diameter running to the engine house and the fire hose house. Pipes 12" in diameter were used for the main lines running out of the water tanks and for the lines running to the water columns at the far west end of the yard, while lines 4" in diameter were used for short distances, such as the line leading to the fire hose house located close to the pump house.

In 1960, the Thurmond water columns, water tanks, and the chemical house were retired from service. These structures that collectively comprised the water station were the last vestige of steam age technology to go out of service in Thurmond. In 1969, a diesel powered pump was installed in the pump house. In 1988, only the two rusted steel water tanks and one water column remain standing. (See appendix for a detailed architectural description of the Water System.)

Thurmond East Yard

Thurmond's East Yard was the assembly and distribution center for the coal traffic coming down to the C & O main line from surrounding coal mines. Here coal cars were marshalled, coupled, and shipped according to destination. Also located here was a car inspection station, which was moved to the engine house in 1963. The car inspection operation was carried out by a "car knocker," armed with a packing iron to check the car's brakes, running gear, draft gear, steam and air connections, and journal boxes. Should some defect be found, the car would be fixed on the spot or kicked out as a "bad order" car for more serious repairs.[93]

The East Yard was indeed a busy place, with hundreds of cars resting on miles of track. At peak employment around twenty-five men worked in the yard office and its auxiliary constructions. A 1916 map shows nine structures in the East Yard, by 1929 there were twenty-two buildings, and in 1988 there were nine buildings in the yard. All extant structures are on the south side of the track.

Starting at the upstream, or east, end of the East Yard there is a yard office built on a steep embankment at river's edge. It is square with vertical board and batten siding with a pyramidal

roof covered with green composite felt. A sill course, a window, and a four-paneled two-tiered door with a transom embody the track elevation and there are 1-1/2 floors beneath the track elevation level. The walls are finished with end boards, a fascia board, and a base board. This structure was erected before 1916. A portion of it was retired in 1947.[94]

Just downstream from the yard office is the car repairer's locker house. This 9' x 35" vertical board wood frame structure has a sliding wood door and two windows on the track side. It is a converted wooden C & O boxcar probably built before the turn of the century. It was once common practice for the railroad to remove the trucks and wheels from select cars and put them to use as a stationary structure such as this one here. This car was relocated from elsewhere to the East Yard in 1940.[95]

Adjacent to the car repairer's locker house is the switchman's shanty. This structure has a shed roof with exposed rafters and vertical board and batten wood siding, and on the track facade is a single door with sliding track, a hinged single door, and two small rectangular window openings. This shanty functioned as the switchman's tool storage facility as well as providing for switchmen when they were not repairing switches. According to a notation on the 1916 East Yard Valuation Map, the switchman's shanty was relocated to its present site in 1934. In 1966, the structure was retired in place.

West of the switchman's shanty is an open, four-tiered wood material storage rack with a small gabled roof. This 6' x 18' rack was constructed after 1939, and was moved about 500' in 1946.[96]

The structure next to the material rack is a three-sided shed built from the steel side panels of a coal hopper welded together. A yard worker could stay inside this shelter and out of inclement weather when work was slow.

About 40' downriver of the worker's shed is the yard's ice house, constructed of board and batten siding with a shed roof. Under overhanging eaves is a fascia board and unevenly spaced exposed rafters. A solid metal door is on the track facade. Here is where ice was kept for use by the railroad.

The next structure in the East Yard is the car repair foreman's office. It has vertical board siding with a single door flanked by two square windows on the front facade. This 9' x 37' building is a converted wooden railroad boxcar built before 1900.

A 7' x 12' latrine is about 35' west of the car repair foreman's office. It is board and batten with a shed roof. Two solid-

faced doors front the track, possibly separating the structure into two separate facilities for blacks and whites.

On the extreme west, or downstream, end of the East Yard stands the Car Department tool house. This is a converted wooden C & O express baggage car built in 1887. It has a barrel shaped tin roof with bowed ends. A clerestory with fourteen lights and curved ends runs the entire length of the roof, and two elliptical arch door openings with continuously curved surrounds front the track. Exterior walls are vertical tongue and groove boards. Tool storage bins line the interior walls, some of which are still labeled. In the center of the track side fascia board is a number plate that designates the structure as number "46." Records indicate this car was taken off its wheels and truck and placed here in 1934; it was retired in 1970.[97]

This is an extremely rare example of an early C & O express baggage car--perhaps the last one of its type that survives. It is in a serious state of dilapidation, but not beyond repair.

Railroad Support Structures

Located south of the tracks between the depot and the engine house are five railroad support structures. Situated the farthest east is the 12' x 14' ice house. Originally, the ice house at Thurmond was a 9' x 37' frame structure, this size indicating that it was probably a converted railroad car. The current ice house was erected before 1949, when it first appears on a Valuation Map. A former railroader notes that three hundred pounds of ice were loaded into the ice house every week to be used for the engine house and bunkhouse.

In 1927, a bunkhouse was constructed between the depot and shop to lodge trainmen awaiting work in Thurmond. Engineers, firemen, conductors, and brakemen made up this group. Although there were several black brakemen employed at Thurmond, the bunkhouse was for white trainmen only.[98] All that remains of the bunkhouse is the water filter shed built sometime before 1940. Graver Tank and Manufacturing Corporation fabricated the water filter and softening equipment housed here, the same company that manufactured the standpipe water tank in Thurmond. Another support shed in the Thurmond yard is the switchman's tool shed, a 12' x 19' structure. Windows and a stove pipe suggest that this was a section foreman's house at one time, although it would be unusual to have a section foreman's house in such close proximity to the bunkhouse.

Not until the 1949 Valuation Map does a tool house appear at this location. It is possible that this structure originally

functioned as a section foreman's house and was located somewhere else in the yard. Conceivably, the structure could have changed functions when it changed locations. Tools for the repair of broken switches were stored here, and the switchman might stay here until he was called out by the yardmaster.

To the west of the switchman's tool shed is the 10' x 30' supply house. On the 1916 Valuation Map there is a supply house of approximately the same size in the same location. Every succeeding Valuation Map shows the same building in the same spot, so it is reasonable to assume from this information that the supply house was constructed in its present location before 1916.

The next structure in the yard is a small shed used as the sand drying and blowing house. An outline of where the sand storage bin made from railroad ties was attached to the east facade is still visible. Inside the shed is a rusted sand drying drum.

Before construction of the extant coal and sanding tower in 1922, there was a sand house and tower on this spot. The only documentation of this structure is from circa 1920 photographs which show the sand house to be a frame one-story building and the sand tower a three-story wood structure with a gable roof oriented parallel to the track.

No sanding facilities are indicated again at this site until the 1964 Valuation Map notation that: "sand bin, sand tower, shifted, sand house constructed." This marked the retirement of the concrete coal/sand tower, and the moving of the sand storage bin to the east end of the extant sand drying and blowing house.

A 1975 photograph shows a barrel roofed shed with a north elevation window and an east elevation double door attached to the east end of the sand storage bin.[99] This diesel era sanding facility consisted of three structures: the drying and blowing house, storage bin, and sanding tower. Only the sanding tower remains intact.

The first railroad support structure north of the tracks and east of the water tanks is the one-story galvanized tin C & O commissary built in 1929. Mr. D. D. Fitzgerald ran a commissary from this building under an agreement with the C & O Railroad Company starting in 1929. Railroaders shopped here on a debit system whereby purchases were deducted from their pay. Fitzgerald owned the building and leased the property from the railroad, and after the 1963 Lafayette Hotel fire destroyed the Thurmond Post Office this structure was converted to the town post office. Armand Humphrey, current Postmaster of Thurmond, owns the building and leases the property from the CSX

Corporation.

West of the water tanks on the north side of the tracks is the section foreman's track car shed. Under the double doors on the south facade is a set of rails that pull out to bisect the main track at a right angle. On these rails, the section foreman's track inspection car was taken from its storage facility to the main track. When the car reached the main line, it was picked up by six men who turned it ninety degrees and placed it down on the main track, at which time the vehicle was driven up and down the tracks in search of potential problems on the line.

These two structures are the only railroad support structures situated north of the tracks. At the east corner of the next trackside building (the Mankin-Cox Building) is the corporate limit of Thurmond. (See appendix for a detailed architectural description of the Railroad Support Structures.)

Diesel Fueling Station and Sanding Tower

Diesel fueling facilities were installed in Thurmond in 1960. These facilities comprised the two separate functions of locomotive fueling and oil separation. Some alterations were made to the facilities in the 1970s as a result of the Environmental Protection Agency concern over engine oil spillage into the New River.

Thurmond's diesel fueling system primarily consisted of a 20,000-gallon fuel tank, a pump house, and a fueling mast. The tank and metal pump house are located west of the engine house, and the fueling mast is located east of the engine house along the track.

With the advent of dieselization Thurmond's engine house was converted to other uses and the coaling tower was rendered obsolete. Engines were still fueled at Thurmond, though. Diesel fuel was siphoned from railroad tanker cars to the diesel storage tank, then was conveyed from the fuel storage tank to a waiting locomotive as follows: 1) from a float or pipe suction in the fuel tank through a strainer to the suction side of pump; 2) from the discharge side of the pump through a check valve and an air release to a meter; 3) from the meter to a lubricating station with a hose connection and a shut off nozzle at the delivery end.

The oil separating facilities worked as follows: 1) the engine oil run off would drain into the pit under the track and then into a holding station; 2) from the holding station the oil would run into a round culvert holding tank; 3) a sump pump in the holding tank, once the oil reached a certain level, would pump the oil into long beds; 4) the oil went into the west end of the

bed where it was separated from the water; 5) the clear water would then run out the opposite end of the bed and back into the river; 6) the left over oil would then be pumped into a half buried oil tank and when this tank was full the oil would be pumped into a tank car and taken away to a reclamation plant. A sanding tower, brought to Thurmond from Russell, Kentucky in 1960, is located in the west end of the yard adjacent to the fueling facility, so as to allow diesel locomotives to make one stop in the yard for sand and fuel. Using a burro crane with a clam shell opening, the wet sand was unloaded for storage in a hopper constructed of railroad ties, which was attached to the concrete drying and blowing house. A former storage shed was adapted to dry the wet sand. This shed housed one drying oven, presumably one of the two in the former concrete drying and blowing house.

Freight Depot (demolished)

Prior to 1963, a freight depot stood directly south of the passenger station. This wood frame structure was approximately 16' x 200'. Old photographs, offering the best documentation, show a hip roof covering the building. Because of its location at the edge of a steep riverbank, the freight depot was supported by a wood trestle foundation and wood bulkhead.

In the 1880s, there was a freight depot operated on the site by Captain W. D. Thurmond. Local farmers brought their produce down the gorge for shipment to towns along the C & O line, and supplies for surrounding towns were unloaded at Thurmond en route to their final destination up the gorge. As towns sprang up in the gorge, the railroad made plans to construct a larger freight depot, and around 1904, the building was erected on the site of an old 50' turntable.

A 1914 track layout plan of Thurmond depicts two platforms on the north side of the freight depot, one labeled a transfer platform. The 1927 Thurmond Valuation Map labels the freight depot as the "Warehouse and Office," while a 1930 site plan shows offices located in the west end of the building. In 1963, the freight house was retired and subsequently demolished.

Bunkhouse (demolished)

On the south side of the tracks at Thurmond, between the passenger depot and the engine house, is the former site of the bunkhouse for white enginemen and trainmen. This 18' x 65'-6" structure was covered with simple drop horizontal siding and topped by a roof of asphalt strip shingles. Construction began

on the bunkhouse in 1927 and it was finished in 1928. W. H. Smith, Jr. was the building contractor.[100]

Quarters for the enginemen were in the eastern segment of the building and were larger than those for the trainmen in the western part. Each section had its own exterior door leading to a separate dormitory, locker room, and kitchen facility. A connecting passage in the rear of the bunkhouse led to a common toilet and washroom. Around 1984, the structure was torn down for scrap lumber.

Two separate single-tier five paneled doors were located on the structure's north elevation. Nine six-over-six double-hung sash windows pierced the front facade, four on the west side and five on the east side. This window configuration was standard for the entire bunkhouse. One square louvered vent was situated under each gable peak at the gable end elevations and a window was beneath each vent.

At the bunkhouse's river elevation there were seven windows and an outshoot that housed the toilet and washroom. The junction of the outshoot and the rear wall was marked by a break in the roof pitch, creating a catslide outline. Each of the three walls of the outshoot contained a small rectangular six-light window.

Extant Thurmond Commercial Structures

Extant commercial structures in Thurmond exhibit elements typical of early twentieth century commercial masonry construction. All three of the town's extant commercial buildings have corbelled parapets, an ornamental feature that is structural rather than applied. The upper story windows lack ornamental surrounds, having only slightly projecting lintels and sills. (See appendix for a detailed architectural description of the Extant Thurmond Commercial Structures.)

This row of structures once formed the center of Thurmond proper. They housed retail stores and banking facilities, with the commercial fronts of the buildings originally containing large display windows as indicated in period photographs. Large panes of glass had only recently become available on the market when these structures were erected, and they quickly became used in Thurmond's "Main Street" commercial fronts to better display merchandise.

A most unusual aspect of Thurmond's Main Street structures is that they were in a town that had no Main Street - Thurmond ran along a main track. Visually, the commercial buildings of Thurmond are part of the railroad yard. It is safe to assume

that the sights, sounds, and smells that permeated the windows and walls of these structures were a constant reminder to persons there that Thurmond was a railroad town.

Thurmond's municipal structures are much simpler in design than the commercial buildings. They are rectangular units constructed of concrete block. The town water works building and the telephone office building are as utilitarian in design as the railroad sheds, but their masonry construction makes them more permanent.

The first of the commercial structures in Thurmond is the Mankin-Cox Building, erected in 1904. On the second floor of this three-story brick building was the office of Dr. J. W. Mankin, a drug store was on the first floor, as was the New River Banking and Trust Company was housed here for a number of years.

The 1906 Goodwin-Kincaid building, west of the Mankin-Cox Building, was a pivotal part of Thurmond's commercial row. At one time it housed a restaurant, two clothing stores, an upstairs doctor's office, and apartments on the second and third floors.

Trackside living in Thurmond had its obvious disadvantages as one former resident remembers the windows would start shaking when the train rounded the bend at Sewell, five miles downriver.[101] By the 1950s the apartments were vacant and the building was suffering from neglect and a subsequent scavenging of building materials by local residents. Today, only the four exterior walls of the Goodwin-Kincaid building remain.

To the immediate west of the Goodwin-Kincaid building is the 1917 structure which has become known as The National Bank of Thurmond building, although it was not built as such. The west bay of the building was extensively renovated in 1923 as the new headquarters for the National Bank of Thurmond, which replaced the original tenant. In addition to businesses at ground level, the Western Union Telegraph Company was on the second floor and living quarters were on the third and fourth. The National Bank of Thurmond, a victim of the Great Depression, was forced to close its doors in 1931 due to depleted reserves.[102] In 1937, the deed to the property was transferred from the National Bank of Thurmond Corporation to Mr. Justus Collins, a local coal operator and Thurmond millionaire.

To the west of the National Bank of Thurmond is the former site of the Lafayette Hotel and the Armour building. Standing west of the Lafayette Hotel/Armour building site is the Thurmond water works, a square concrete block building with a flat roof that houses the town's water system. The roof and wall junction is demarcated by a 2" concrete cap. Over the central door there is

a gable hood supported by two brackets.

Originally, water for Thurmond was gravity fed from a wooden tank located on the hill directly above the water works. This tank is still there, but its function has been taken over by an adjacent modern tank. The current water works building is a reduced version of a former structure, as evidenced by the foundation stones located around the east and north side of the building.

The second municipal structure in Thurmond is the telephone office. This too, is a concrete block building. It has a timber shed roof supported by a row of exposed rafters, and a central single door with a single tier of four wood panels and a glazed top panel approximately 3' high. The door is covered by a gable hood supported by two brackets and a set of six concrete steps lead up to the door, which is set 4'-2-1/2" off the ground.

Thurmond South Side

Across the New River from Thurmond is the area known to the railroad as South Side Junction. This section was incorporated by Thomas G. McKell as part of the town of Glen Jean shortly after Captain Thurmond's incorporation of Thurmond in 1903. McKell took this action to protect several properties he owned on the South Side which allowed certain "games of sport" which Captain Thurmond disdained. As a result of the lively social life on the south side, technically not even in Thurmond proper, Thurmond gained the reputation of being untamed and lawless.

The South Side of infamous legend was known as Ballyhack, and it became the social center of the New River Gorge after the construction of the Dun Glen Hotel in 1900. Ballyhack was the place to blow off steam and have some fun - wholesome or otherwise. It was there that the Dun Glen supposedly ran a continuous fourteen year poker game, and where the hotel bar never closed until it was forced to by the West Virginia Prohibition law of 1914. For railroaders coming off their shift the South Side must have been an enticing diversion, but to the railroad it was the transportation node for some of the most productive coal fields in West Virginia.

In 1870, John Dun of Chillocothe, Ohio, presented his daughter, Jean, with an interest in some 12,500 acres of unseen hill property in West Virginia. In the same year she married Thomas G. McKell, a man who was quick to grasp the potential of his new bride's coal-rich parcel. In a speculative venture, McKell proceeded to purchase an additional 12,500 acres located at the base of the Sewell coal seam.[103]

McKell and his new bride moved to West Virginia in the 1880s and founded the town of Glen Jean, named for McKell's wife. In 1886, McKell deeded land to the C & O Railroad for a right of way at Riverview. In the following year he conveyed to the New River Bridge Company the land necessary to build a bridge across the New River near the mouth of Loup Creek. The New River Bridge Company, owned by C & O director A. A. Low, soon began to erect a triple-span iron truss bridge supported by stone piers.[104] In 1890, this crucial bridge was completed and deeded to the Chesapeake and Ohio for one dollar.[105] When the Loup Creek branch line was completed to the bottom of the New River Gorge in 1892 and coal first came down from mines to connect with the C & O main line at Thurmond, the bridge became vitally important.

In 1915, the original railroad bridge was strengthened, a new superstructure was built at the north end, concrete piers replaced the stone ones, and a vehicular lane was added to give the bridge its present look. Little was done to alter the appearance of the bridge until major renovations on the vehicular appendage were done in the 1980s.

In 1900, the 100-room Dun Glen Hotel was built on the south side. It was a large frame structure with a spacious wrap-around first floor veranda, and three large intersecting front gables separated by four gabled roof dormers. A large sign that read "Dun Glen" sat on top of the roof ridge and could be seen from across the river. Inside this 4-1/2-story structure was an ice plant, barber shop, laundry, post office, and the now legendary bar. Without equal in the New River Gorge, the Dun Glen was the social center of the area.

A South Side Junction site plan dating between 1915 and 1921 shows a total of thirteen main structures. West of Dun Loup Creek was a store, three houses, the Loup Branch railroad yard office, a shed, a shanty, and an iron viaduct spanning Loup Creek to the Dun Glen Hotel. On the east side of the creek was an engine house, worker's quarters, and three cabins--all most likely connected with the hotel.

A 1927 C & O Valuation Map shows two shanties (one was a 12' x 20' one-room laborer's shanty), a tool house, a flagman's house, two stores, three dwellings, and two section foreman's houses on the South Side west of Loup Creek. According to specifications, the standard section foreman's houses were frame, 29'-5" square, with four rooms and a pyramid tar paper roof.

As in Thurmond, fire has been a menace on the South Side. In 1922, a fire destroyed the Collins Grocery and Dry Goods store, the South Side Drug Store, a shoe repair shop, a theatre, and Lykin's Drugstore. Collins Grocery and the South Side Drug Store

relocated across the river after the conflagration.

The death knell for the South Side commercial district sounded when the Dun Glen burned under suspicious circumstances in 1930. Demand for New River coal started to drop and development of the Fayette plateau was in full swing by this time, so there was no longer a need for a large hotel in the gorge like the Dun Glen. Coal trains came down Dun Loup Creek in ever decreasing numbers until South Side Junction and Ballyhack faded into obscurity.

Appendix

Architectural Description: Thurmond Passenger Depot

The Thurmond passenger depot is a two-story, 154' x 16' rectangular wood frame structure with an intersecting gable on the north, or track, side. This gable appendage houses a signal tower. Also on the north side is a first floor pent roof running the length of the building. An exterior stairway leads to a second story balcony on the south side. The depot has a moderate pitch gable roof covered with gray slate shingles, the peak of which is capped with a plain galvanized cresting plate.

The junction of the roof and walls are characterized by fascia boards, wide overhanging eaves, and raking boards on the gable ends. Walls are clad in vertical board and batten siding; boards are 8" wide and the plain battens are 2" wide. A sill course is located 3-1/2' above the ground on all four sides. Below this member the walls are covered with vertical tongue and grove wood siding that rests on a 6" wide watertable. Wood end boards are located on each of the depot's corners.

There is no correlation between the second and first floor piercing patterns on the north and south facades. The placement of the doors and windows reflect the interior division of the space rather than an attempt at symmetry. Standard depot windows are two-over-two light double-hung sash windows surrounded by plain trim. Windows of this type found on the first floor are taller than those on the second floor. Unless otherwise described, this applies to all windows in the depot.

The north elevation signal tower projects out 4'-7" from the building's core. This appendage is a box oriel window, piercing a pent roof. Windows run on a continuous horizontal band, six in front and one on each side. They are one-over-one double-hung sash windows with plain trim surrounds. Below these windows are alternating courses of plain and fish scale cypress wood shingles, the only applied ornament on the structure.

Also projecting out 4'-7" from the north elevation of the building's core is the pent roof. It is covered with gray slate shingles and has exposed rafters spaced 2' apart, which rest on a single purlin. This roof is supported by sixteen unevenly spaced chamfered knee brace brackets, and four of the sixteen brackets consist only of knee braces. These were probably added later as replacements or for additional support. The wall and soffit segments of the twelve full brackets have ovolo curved exposed

ends.

A total of nine windows rest on the slightly projecting sill course and run the length of the north elevation's first floor, and seventeen windows are on the second floor--excluding those on the signal tower.

There are five single doors on the north facade; the two closest to the east end are single-tier five panel doors, the next three are two-tier four panel doors. All five doors are topped by two-light transoms, 2'-4" high. Two double doors are located near the west end, where the baggage room is located. Each double door has four inset panels composed of diagonally oriented 3-1/2" boards. Boards in the upper and lower panels of each single door run in opposite directions, creating the effect of a large "X." Both double doors are topped by a four-light transom. Plain trim surrounds the windows and the doors.

The west end of the depot is gabled with a wood string course which is slightly peaked in the middle and separates the first and second floors. Each floor has one window centered under the gable peak. Under the second story window is the depot identification sign which reads "THURMOND."

Dominant features of the south elevation of the depot include the exterior stairway and balcony. These run almost the full length of the building and are covered by an extension of the roof, as indicated by a break in the core structure's roof pitch. The roof extension is covered in gray slate shingles and has exposed rafters. A stairway at the west end runs parallel to the structure and is supported by two wooden trestles, the outside members of which are two-story high chamfered posts. There are twenty risers on the staircase and a side rail consisting of conduit pipe hand and knee rails. A wood string course is continued from the west end of the building until it reaches the top of this stairway. Support for the balcony comes from second story chamfered posts and knee brackets, which are similar to but larger than those located on the north facade. These brackets do not have wall segments and some of the brackets brace segments that are attached to horizontal wood bearing members mounted onto the walls. The balustrade on the balcony consists of chamfered balusters and a molded handrail that runs between chamfered posts. Flooring on the balcony consists of tongue and groove boards.

A random piercing pattern characterizes the south elevation. The second story has twelve windows and eight doors. All but one door have five panels and three tiers, above which are two-light transoms 2'-4" high. The door that is the exception has six panels in three tiers. The first floor has eleven windows and

one small square opening covered with a wire grate located approximately in the middle of the facade (this window may have been used to ventilate a restroom). There are four doors located on the first floor. Towards the west end is a double door, each door consisting of a single tier of three tongue and groove vertical board inset panels. Next is a single-tier five paneled door followed by two double-tiered five paneled doors with 2'-4" high two-light transoms. These three single doors have four riser steps leading up to them.

At the east end of the structure is a gable roof. A wood string course, slightly peaked at the top, separates the two floors. In the center of the east side is the depot identification sign. The first floor has a double window centered under the gable peak.

Horizontally running square beams partially exposed on the south and east facades comprise the depot foundation. There are five square openings in the exposed foundation on the south elevation, presumably to gain access to the heating system.

In 1914, a 15' extension was added to the west end of the depot. As a result, the north half of the east wall of the baggage room was removed, extending this room's area by 8'-11". A 5' extension of the men's waiting room shortened the ticket office by 5'. The women's waiting room was lengthened by 15', moving the toilet facilities 15' further east. There are no plans for the repartitioning of the second floor space. However, it is possible that the McKell Coal and Coke Company offices were located in the additional 15' of second floor space created by this extension.

The 1925 standard painting for frame stations on the C & O line indicates the following colors : 1) cornice, brackets, sill course, baseboards, door stiles and rails--white; 2) window sashes--terra cotta; 3) body and door panels--colonial buff; 4) the paint is "to be three coat lead and oil." While it is not certain that the depot was previously painted to match these specifications, there is a coat of what appears to be yellow or colonial buff underneath the existing paint on the north exterior wall.

In 1931, a new color scheme called for: 1) cornice, brackets, sill course--light gray; 2) body of building and door panels--medium gray; 3) doors and baseboards--dark gray. These are the current colors of Thurmond's depot.

Architectural Description: Engine House

The Thurmond engine house measures 150' x 66' with two outshoot additions built on the south wall. A low pitched gable roof is topped by two monitors which mark the division between the original building and a later extension. Slate covers the primary roof and the monitor roof. The main roof is constructed of 3" x 12" purlins and 2" x 8" members comprising a Warren trussing system.

Two monitors approximately 5' high run the course of the roofline. The east monitor is 33' long and begins 3' from the east roof edge. There is a 4' space between the east and west monitor, which is 23' in length and ends two feet from the west roof edge. Exposed rafters spaced one foot apart support the monitors' roofs. Monitor ends are vertical board and batten and monitor sides have 9 horizontal wood louvers in 2' segments, separated by 4" wide vertical members. Through these louvers the engine house was ventilated. No doubt this was a grimy and sooty place with engines being constantly run into the shop for repair.

Engine house walls are vertical 10" wide board and 3" wide battens with end boards and a sillcourse. Several of the remaining battens have molded faces, indicating that they are original to the structure. A wood belt course ran around the structure approximately one foot above the windows. This course masked the abutment between the first and second tier of exterior boards. Only segments of this course still exist. Framing consists of 4" x 4" studs with 3" x 4" cross braces. The three bents of the structure are separated by 6" x 8" end posts and 6" x 6" interior posts in the east portion, and 12" x 12" posts throughout the west portion of the building. In the east portion the two rows of interior posts are approximately 21' apart, each one having 6" x 8" supporting braces. Each end post is supported by one 4" x 6" brace and the west portion interior posts are supported by 6" x 6" braces. Exterior posts have 7" x 8" braces.

Four single doors, three windows, and two engine doors comprise the building's east elevation. The double engine doors have plain trim, diagonal cross braces, and strap hinges located at the top, bottom, and middle sections. Originally, engine door openings had forty-five degree angled corners at the top with doors measuring 15'-6" high x 12'-8" wide. Standards for engine house design about this time specify that engine house doors should not be less that 16' high and 13' wide.[106] These specifications would accommodate most locomotives until the mammoth Class H-8 Mallet types appeared on the C & O in 1941. Door openings were necessarily enlarged to 18' to accommodate these behemoths measuring 16'-7" high and 11'-2" wide.

North of the engine doors is a single door with a plain plywood face. Directly south of the engine doors is a 7'-10" x 4'-3"

single door constructed of diagonal boards 3-1/2" wide. It has one square window with plain trim. Also on the shop's east facade is a second standard door covered by a metal awning and flanked by two twelve-over-twelve double-hung sash windows. Between this door and the south window is a ladder leading to the roof. This door has plain trim and a rectangular glazed panel and is the entrance to the crew office.

In the east corner of the south end outshoot was the General Foreman's Office. Its east wall consists of one door and one window, both having metal awnings. The window is a two-over-two double-hung sash type with plain trim and the door opening contains only a wood frame screen door.

There are twenty-three windows measuring 11' x 4' with plain trim on the south wall. Approximately one foot above the window lintels there is a wood stringcourse. Large windows were in keeping with the railroads published recommendations for engine houses that specified: "windows in the outer walls should be made as large as practicable and contain the largest glass or light area consistent with the requisite strength." It was also advised to allow only enough space between windows necessary to support window frames.[107] Adequate light was essential for the precision machining and maintenance of the locomotives. The interior of Thurmond's repair shop was whitewashed in an effort to provide more interior light.

On the north wall there are three single doors and what appears to be the boarded over frame of a double door. In actuality, this boarded up area is a quick repair made to a collapsed area of the building for the 1986 filming of the movie "Matewan." The three doors on this facade are spaced about 20' to 25' apart with solid wood faces and plain trim. Two ladders to the roof are located on this facade. Two gutter pipe encasements constructed of the same board and batten are located on this facade.

The dominant feature of the west facade is a pair of engine doors; the one on the north side is the same as the two on the east facade, while the south engine door has the forty-five degree top corner angle as depicted in the original plan elevations. Above this door is the original building number "33." South of the second engine door is a single door with a solid wood face.

Like the north side, the south facade of the building has twenty-three standard windows. West section windows are spaced 2' apart, while east section ones are 1-1/2' apart. This facade now lacks the belt course but has the same sill course as the north facade. On the river side is an outshoot with three windows, the two end windows are two-over two double-hung sash with plain

trim, the center window is a fixed casement measuring 1'-5" x 2'-3".

Because the structure is situated on a steep riverbank, the foundations of the engine house are supported by a trestle system made up of 1' wide piers, 3" x 10" diagonal braces, and two sets of stringers made of two 3" x 10" members bolted together. The last two rows of piers on the river side are set in sunken cavities filled with stone. Additional piers are located under the working pit areas to support the incredible locomotive weights which went as high as 1,208,900 pounds for H-8 Mallets.[108]

Flooring under the machine shop area consists of 4" x 12" joists and 3" x 12" joists under the track area. The shop area flooring is wood, concrete, and cinder filling.

The interior shed located west of the washroom entrance was the electrical shop. This vertical board shed has a flat roof partially covered with tar paper. On the north elevation of the shed there is a double sash casement window. A two tiered, two paneled door with a glazed top panel is located on the east facade of this structure. The west facade has a nine-light sliding window. This electrical shop appears to have been an outside structure at one time; its structural integrity not being necessary for an interior partition.

Immediately to the west of this shed was the site of the welding shop, where a Lincoln Arc Welder was used. Attached to this shop is a storage area. Both the shop and the storage area are constructed of unfinished wood and have no roofing.

Adjacent to the walled storage area is the tool room. This interior shed is approximately 12' high x 16' deep x 33' long. Two segments comprise the tool room; one with a gable roof and the other with a flat roof. The flat roofed segment is constructed of 3-1/2" vertical siding. It has a plain base board and cornice board, a door opening in the north side and a continuous band of four six-over-six double-hung sash windows that run the entire length of the east facade. This segment of the tool room was a later addition.

On the north elevation of the gable roof segment constructed of tongue and groove vertical siding is the ghost mark of a sign which once read "TOOL ROOM." This enclosure housed the original tool room. In the center of this elevation is a double door topped by a twelve-light two-tier transom window. The bottom portion of the doors has the same vertical tongue and groove boards as the rest of this segment, and the upper portion of the doors has a four-light glazed panel. Plain trim surrounds the doors, which are flanked by two six-over-six double-hung sash

windows. The roof has a slight eave overhang and a narrow molded strip masks the roof-wall junction. The south wall of this structure has three six-over-six double hung sash windows in a continuous row. On the west side of the wall that separates the two segments is a one tier three panel door, the top panel being glazed, and a large rectangular window made from a single glass pane.

The west elevation of this segment is the same as the east elevation of the flat roofed segment. Originally, both these walls were sides of the gable roofed segment. Engine house workers would come into this segment of the tool room to exchange brass chips for tools. After dieselization, the tool room's east facade was moved down and the entire structure became a storeroom, replacing the dismantled storeroom in the yard. West of the tool room was an outshoot used for the "colored" workers' washroom. The outshoot and much of the south wall surrounding the door to the washroom have collapsed.

A coal storage bin is located on the south end of the west facade. Instead of the usual board and batten construction, this area has horizontal siding. The wall in this section of the building was torn out in 1965 to remove the old locomotive boiler and install the existing one to supply steam heat to the railroad properties.

Architectural Description: Coaling Tower

The coaling station is a 77'-2" high reinforced concrete structure supported by fourteen columns. It has a concrete gable roof of a moderate pitch and a slight eave overhang. A light rack is mounted on the west side of the gable immediately beyond the ridge. All of the vertical and horizontal corners of the walls are chamfered--the vertical corners were chamfered by placing triangular strips in the corners of the forms and the horizontal corners were chamfered with an edging tool. Reinforcement bars in alternating rows are located in the bottom slab of the footings.

At its base, the east facade has three bents, with the two outside bents shorter than the center one. C & O tracks from the main line, slightly raised from ground level on mounded earth, run through the center bent. This facade is composed of flat concrete. Two signs exist above the center bent. The top sign identifies the manufacturer - Fairbanks, Morse and Company, and the bottom one probably identified the yard - Thurmond.

The north facade has three bents separated by four columns. A small board and batten shed is in the middle bent, and the

concrete walls and ceiling of a stairway leading to a sunken coal offloading hopper is visible through the west end open bent. The body of the structure on the west facade has four square holes where overchute gates and aprons were attached but are now gone; the two lower holes are located directly above the end columns, and the two upper ones are slightly higher and further in from the sides. Above the overchute holes are a line of pulleys attached to brackets mounted on the wall. These are part of a cast iron block and tackle system that facilitated the opening, closing, and positioning of the overchute gates and aprons which loaded the coal into engine tenders. The entire overchute apparatus has been removed. Two overhead lights mounted on a horizontal bar are located above the overchute holes.

On the north facade is a monitor area containing the top flight of exterior stairs, a door opening, a sash window, and a ladder mounted on projecting steel beams. Wood treads, a hand rail, and a knee rail are all that constitute these rather high stairs. Immediately left of the central gable peak is a landing that fronts the door opening leading to the monitor's coal hauling machinery. Under the gable peak is a window opening originally containing a six-over-six double-hung sash window. Between the door opening and the window opening is a small ladder mounted to steel members attached to the wall face.

The three bents on the west facade are identical to those on the east facade. In the north bent was an office, and the south bent housed the engine used to power the structure's coal crusher. An exterior stairway with wood treads and a hand and knee rail is the distinguishing feature of the west elevation. The bottom of the stairway is above the south bent, where formerly, a landing was located from which an additional stairway projected out to provide access to the ground. Running along this stairway is the sand elevation pipe which fed sand for the engines from the adjacent sand house into the sand bin located in the coaling tower.

The monitor area of the south facade has one window opening, identical to the one on the north facade. The body of this elevation is the same as that of the north side, with one exception. Running in a diagonal from the monitor area to the middle of the pulleys is a pipe - presumably a sanding pipe. The southwest bent has three one-story concrete walls and a roof. This bent houses the electric motor that ran the coal crusher. The middle bent is encased by concrete walls on all four sides, and a pulley mechanism that conveyed the coal to the monitor is contained in this area.

Architectural Description: Water System

The first of four water tanks to be built in Thurmond was erected in the 1890s. This tank, about 25' in diameter, shows up on the 1898 valuation map of Thurmond. This was probably an 1892 standard C & O tank. Early photos of the yard show a tank that matches a published description of the standard tank plan as follows: the foundation is made of 18" x 18" x 12" stone; the trestle frame is made from 12" x 12" posts with 12" x 14" caps; there are twenty 4" x 12" main joists 16" apart; the trestle also consists of eighteen 4" x 6" chime joists, set at right angles 16" apart, and 6" x 6" diagonals and struts. The flat bottomed tub has a 50,000 gallon capacity. Staves on the tank bottom are 12" wide and 3" thick, and tank walls are constructed of 1" x 6" tongue and groove board covered with tar paper. In the drum are two concentric walls separated by 6" of airspace as a frost proofing feature.[109]

The second wooden water tank in Thurmond appears on an early photo to have been elevated approximately 40', supported on four steel trestles that formed a cross. Each trestle was comprised of two tiers, each with metal diagonal bracing members. In the center of this cross was a large steel column. A ladder led to the base of the tank. The drum of the tank is held together by twelve flat hoops. There is a low conical hexagonal-type roof on the tank. Its design appears to be similar to a 100,000 gallon capacity wooden tank found along the Pennsylvania Railroad at this time.

The 1914 steel water tank has a wooden hexagonal roof that rests on 2" x 6" joists spaced 2" apart. The roof is made of 2" x 8" boards laid horizontally. Underneath the wood roof is evidence of tar sheathing, and extending 2' above the roof is the center post of the tank. A ladder runs from the base of the tank on the southeast leg to the roof.

In 1927, a new standpipe water tower 53' high and 201,000 gallons capacity, was installed on the north side of the tracks. Riveted shell sheets comprise the drum of the tank, each sheet having a circumference dimension of approximately 15'-8" long and 5' wide. Vertical rivets are placed in alternating columns of three, 2" from the seams and each other. The horizontal rivets are located in rows 1-1/2" apart. Six steel sheets make up the circumference; the drum of the tank consists of nine vertical rows of sheets; a blow-off valve is located in the bottom row of sheets. A ladder runs from the bottom row up to the rim of the dome and projects out 5" from the drum face. The dome of the tank is made up of seventeen tapered panels and a circular plate cap, with one of the panels having a 2'-7" square hinged door providing access to an interior platform. A revolving roof ladder that moves on a roller at the outer dome edge is pivoted

to the apex of the center circular plate. This type of tower usually has four pipes located at the base: a tank supply pipe, a water column supply pipe, an overflow pipe, and a washout pipe.[110]

Architectural Description: Railroad Support Structures

The gabled roof on the ice house is covered with burlap and has a vent pipe, exposed rafters support the roof, and the walls are comprised of 5" wide horizontal wood siding finished with 4" endboards. Horizontal siding, rather than board and batten, reflects a need for a more airtight construction. Extending out on the east side in front of the only door is a concrete paved area. Under the peak of the gable on the east side is the building number "50." A 1'-4" thick concrete slab serves as the foundation for the structure.
One wall of the water filter shed connected with the bunkhouse and the remaining three shed walls are covered with 3'-2" wide horizontal siding boards. The shed roof is constructed of 1" x 8" planks covered with built-up tar and burlap roofing. The track front of the roof is 10' high and the back is 9' high. Nine randomly sized vertical boards covered with 1-1/2" wide batten boards form the track side elevation. Since this shed was attached to the bunkhouse, its construction reflects a desire for a more permanent construction method. Shed corners are finished with 4" wide end boards. A 7-1\2" horizontal member serves as a base board under the siding. Six tread steps with a plain newel post and hand rail lead to a five panel single-tier door on the east side. Four blocks form the filter house foundation; two on track side are concrete while the south side of the structure rests on wood blocks.

Another support shed in the yard is the switchman's tool shed, a 12' x 19' gable roofed board and batten structure. Its roof has an asphalt covering, a stovepipe, and a 1'-5" eave overhang. Exposed rafters and gable end raking boards are found at the wall and roof junction. On the north, or track elevation, is a double door constructed of vertical tongue and groove boards, three horizontal rails, and diagonal bracing members. One square four-light casement window exists on both the west and south elevations. These windows and the stove pipe suggest that this was a section foreman's house at one time, although it would be unusual to have a section foreman's house in such close proximity to the bunkhouse.[111]

To the west of the switchman's tool shed is the 10' x 30' board and batten supply house which has a shed roof and a row of transom windows that run the length of the track elevation. The battens on this structure have molded faces, indicating that it was built between 1900 and 1920. The shed roof with roof eaves

extending out one foot on all sides rests on exposed rafters spaced two feet apart. A row of transom lights consist of five windows, each with two lights separated by plain trim. A door with three rails and two diagonal members bracing its vertical slat face is located on the east side of the track elevation, next to which is a wood frame mounted to the wall. West of this frame is an 11' track for a sliding door, constructed of 5" wide vertical members. The east elevation of this shed has two square windows with plain trim; one measures 3'-5" square, the other 3'-8" square.

The next support structure in the yard is a small shed with two windows, one door, and one door opening. It was used as the sand drying and blowing house. Its shed roof has a stove pipe on it and an 8" wide fascia board underneath. Shiplap joint horizontal boards comprise the walls, the corners of which are finished with end boards. A poured concrete base 10' square and 8" high forms the foundation. Both the south and north elevations have six-over-six double-hung sash windows with plain trim. An east side door opening appears to have been cut out of the wall. The west facade contained a door, only the remnants of which remain.

Only two support structures remain on the north side of the track. East of the water tanks is the one-story galvanized tin C & O commissary building built in 1929, with a moderate pitch gable roof covered with green composite felt. A concrete step leads up to each of two doors, and three windows comprise the track elevation. A single-tier three panel door is on the west end; two of the panels are located in the bottom half of the door. Double doors are located in the center of the building. Both doors have a three-tier fifteen light glazing pattern, and one of the doors has a wood frame screen door. Above both doors is a six-light transom.

Two of the three windows on this facade are six-over-six double-hung sash windows. One of these windows is located between the doors, and the other is at the east end of the track elevation. Between the double doors and window on the east end is a twelve-light horizontally oriented hopper window with plain trim. All the windows, the transom, and the glazed doors are covered with diagonal wire mesh to protect windows from being broken due to the building's close proximity to the railroad track.

Attached to the west side of the building are two sheds. The front one is constructed of horizontal wood shiplap siding and is 6-1\2' tall with a vertical board door and two louvered vents on the track side. This shed projects out slightly beyond the commissary's track elevation, its roof resting on exposed rafters. Extending out from the roof is a stove pipe. Coal was stored in this shed.

To the rear of this shed is another building which is 8" taller than the front one, but does not project out as far from the building core. A shed roof with exposed rafters also covers the second appendage. Two air vents can be seen on the roof. Toilet facilities are housed in this shed, which rests on a concrete block foundation.

West of the water tanks is the section foreman's track car shed, a board and batten structure with a gable roof, the ends of which are oriented towards the track. The battens are molded, indicating a construction date between 1900 and 1920, while the roof is constructed of 12" board and covered with tar paper. On the west facade of the structure is one square four-light casement window with plain trim. A similar window is located on the north or rear facade. A double door, consisting of 3" vertical tongue and groove boards and three horizontal rails, is located on the south facade facing the track. Under the doors is a set of rails that pull out to abut the main track at a right angle, where the section foreman's track inspection car was taken from its storage facility to the main track.

In a 1949 railroad site plan, this structure is labeled as a lineman's tool shed. The extant building does, indeed, match the C & O recommended plans for this type of tool shed. It is likely that the bottom rails were added under the door of the lineman's tool shed, converting it to the section foreman's track car shed.

Architectural Description: Thurmond Extant Commercial Structures

The Thurmond commercial district comprises roughly half the number of buildings it had in the early 20th century. Gone is the large Lafayette Hotel and the smaller Armour Building. Extant structures in Thurmond proper include three commercial structures (one of which has been gutted) and two small municipal structures.

The Mankin-Cox building, the easternmost structure, is a three-story brick stretcher bond structure. The track facade is yellow brick and the rest of the building is red brick. It is characterized at the top by two end chimneys, a brick corbelled parapet, and three brick corbels. Originally, there was a pediment with the building name and date located in the center of the front roof line. Several reverse relief brick courses, a sawtooth course, and a row of small brick header corbels located between the three main corbels form the brick parapet. A four-bay piercing pattern is found on the upper two floors with one over one double-hung sash windows with a segmental arch cap and rusticated stone sill, while a three-bay commercial front topped

by an iron beam adorns the first floor. This beam has five cast iron rosettes and four rectangular plates that act as capitals for the brick pilasters that separate the bays.

A vertical tongue and groove inset panel forms the base of the Mankin-Cox building's east bay, above which is a series of horizontal shiplapped boards. At the top of this bay is a grid of square frosted glass panes. The central bay, the building's main entryway, has two solid corner brackets at the top corners. The floor of the main entry's vestibule is a diagonally oriented corner. Single light transoms top each of two doors. There is an east door in the vestibule that has two horizontal panels above which is a single glazed panel. With the exception of the bottom panels being divided by a center vertical member, the west bay is identical to its east counterpart. Two stone steps lead to the front entry, under which is the foundation of three rusticated stone courses.

The Mankin-Cox building was built in 1904, the first of Thurmond's extant track side commercial structures. Located on the east end of the first floor was the Mankin Drug Company, on the west end the New River Banking and Trust Company, and on upper floors there were apartments.

A gutted, three-story rusticated limestone commercial structure referred to as the Goodwin-Kincaid building stands west of the Mankin-Cox building. It consists of a corbelled parapet, a nine-bay second and third floor piercing pattern, and a first floor commercial facade separated into two bays.

Rusticated stone blocks vary in height from 8" to 10" on the Goodwin-Kincaid building. The parapet is capped by stone coping and consists of three courses, and below these courses are two additional courses that taper down to the building's face plane. Twelve windows in the east two thirds of the building's upper floors are all two-over-two double-hung sash type with 6" wide rusticated stone lintels and sills. In the west third of the building face one-over-one-over-one triple-hung sash windows also with 6" wide rusticated stone lintels and sills.

An east and west bay capped by a horizontal iron beam form the first floor commercial front. The east bay, twice as long as the west bay, contains three sets of windows that match those on the west bay and two sets of doors. Below the window sill are two horizontal panels with relief moldings. A large six-light turn of the century display window covers the front. Above the molded wood lintel is a row of four coffered panels.

A set of easternmost double doors on the Goodwin-Kincaid building have transoms framed by decorative cast iron columns. Each door

has a bottom panel and large single glazed panel with door surrounds of molded trim. Both doors are topped by a molded entablature, and above each double door is a three-light transom. Cast iron columns flank the doors with a capital of a double tulip motif, a fluted shaft, and a molded base resting on an unadorned pedestal.

At the center of the building is a set of windows similar to the east set except that they are divided by a 1'-3-1/2" column. The windows' top sections have four coffered panels, two on each side of the dividing column creating two different windows, each with four lights. Below the windows are two panels that have elongated versions of the east window panels.

A set of doors are located in a vestibule with one angled side. Both the angled and flush side have single doors with a two-light transom, a bottom panel, a tall single glazed panel, and molded trim. Columns that frame the door opening are the same as those framing the east door, and the single window is exactly the same as the east end window.

A rusticated stone column on the Goodwin-Kincaid building separates the west bay. This bay is composed of three windows and one door, all of which are separated by the same cast iron columns found throughout the building's store front. From east to west this last bay is pierced by an attenuated window, a square window, a single door with a one light transom, and another square window. The bottom panels under the windows are inset vertical tongue and groove boards surrounded by plain trim, and panels above the windows are made of 6" wide vertical boards. The entire building rests on 8" thick rusticated stone plinths. An elevated boardwalk that runs the length of the building's track facade is a later addition.

To the immediate west of the Goodwin-Kincaid building is the structure known as the National Bank of Thurmond building, although it was not built as such. It is a four-story common bond brick structure with a corbelled brick parapet along the top of the front facade. The second through fourth stories have an unevenly spaced piercing pattern with windows roughly grouped into three sections, with two windows in each section. Two bays divide the commercial first floor front: an east bay consists of a modern glass door next to a modern store front, and a west bay has an applied Beaux Arts classicized facade constructed of dressed stone.

The west bay of the building was extensively renovated in 1923 as the new headquarters for The National Bank of Thurmond. A copper cresting plate tops the roof and wall junction. Under the cresting is a corbelled brick cornice, each end of which has a

1'-6" foot wide corbel. The upper stories of the track facade consist of three sets of one-over-one sash windows with cut stone sills. A modern metal frame door with a metal cross bar is inset into an opening capped by a row of vertically laid stretcher bricks, the only remaining evidence of the original east bay store front. A modern store front containing a set of metal double doors followed by two large glass windows completes the remaining section of the east bay.

Dressed limestone was used for the building's Beaux Arts classicized west bay commercial front. Two pilasters flank a full entablature supported by two engaged quarter columns and two full Tuscan columns, and two squared quarter columns made from dressed limestone block are attached to the end pilasters. These Tuscan columns, with smooth shafts, divide the facade into three equal segments.

On the eastern segment of the applied facade is the bank's entry door, and west of this door are two sets of windows. The window entablature has a molded cornice, under which is a row of dentil molding. A simple molding separates the frieze, with "National Bank of Thurmond" inscribed across it, from the plain architrave.

Metal framed storm doors cover the single-tier two glazed panel main entry double doors. The top glazed door panels are square and contain radiating muntins. Above the door is an entablature with scotia curved ends. The pediment consists of molded trim and cornice returns, and under its peak is a round panel with "NBT" inscribed in it. Two square windows with radiating muntins are located behind the door pediment. In the middle segment of the facade is a ribbon of four-paned windows, above which are four square windows divided by radiating muntins. Adjacent windows are the same as the center set.

The National Bank of Thurmond building was erected in 1917, prior to which time, the site contained a one-story frame structure. A mercantile establishment first occupied the existing building. The Bullock Realty Company sold the property to the National Bank of Thurmond in 1922,[112] and after the bank purchased the building the classicized stone facade was added.

The National Bank of Thurmond moved from the Lafayette Hotel to this building in 1923. A Fayette Tribune article of May 5, 1923 notes that a new eleven ton reinforced concrete and steel lined Mosler vault was installed by the bank when it moved into the building.

## Notes

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ADDENDUM TO
CHESAPEAKE & OHIO RAILROAD, THURMOND YARDS
(Thurmond Yards)
Eastern side of the New River, opposite the
mouths of Arbuckle and Dunlop Creeks
Thurmond
Fayette County
West Virginia

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